

PACIFIC STATES/BRITISH COLUMBIA  
OIL SPILL TASK FORCE



2012 ANNUAL REPORT

# PACIFIC STATES/BRITISH COLUMBIA OIL SPILL TASK FORCE

---

## 2012 ANNUAL REPORT

---



Editor: JEAN CAMERON  
Executive Coordinator  
Pacific States/British Columbia Oil Spill Task Force

Art, Design & CHRISTY SUTTON  
Production: Sutton Design Ventures



Printed on recycled paper



## TABLE OF CONTENTS

---

PREFACE	PAGE 1
VISION, MISSION, GOALS AND OBJECTIVES	2
KEY TASK FORCE PERSONNEL	3
OIL SPILL TASK FORCE ACCOMPLISHMENTS	4
FROM THE EXECUTIVE COORDINATOR	8
2011-2012 IN REVIEW	10
Oil Spill Task Force Activities and Accomplishments	
Spill Prevention Projects	10
Spill Preparedness and Response Projects	36
Communications Projects	41
Task Force Member Agency Activities and Accomplishments	
Alaska	44
British Columbia	52
California	56
Hawaii	62
Oregon	64
Washington	68

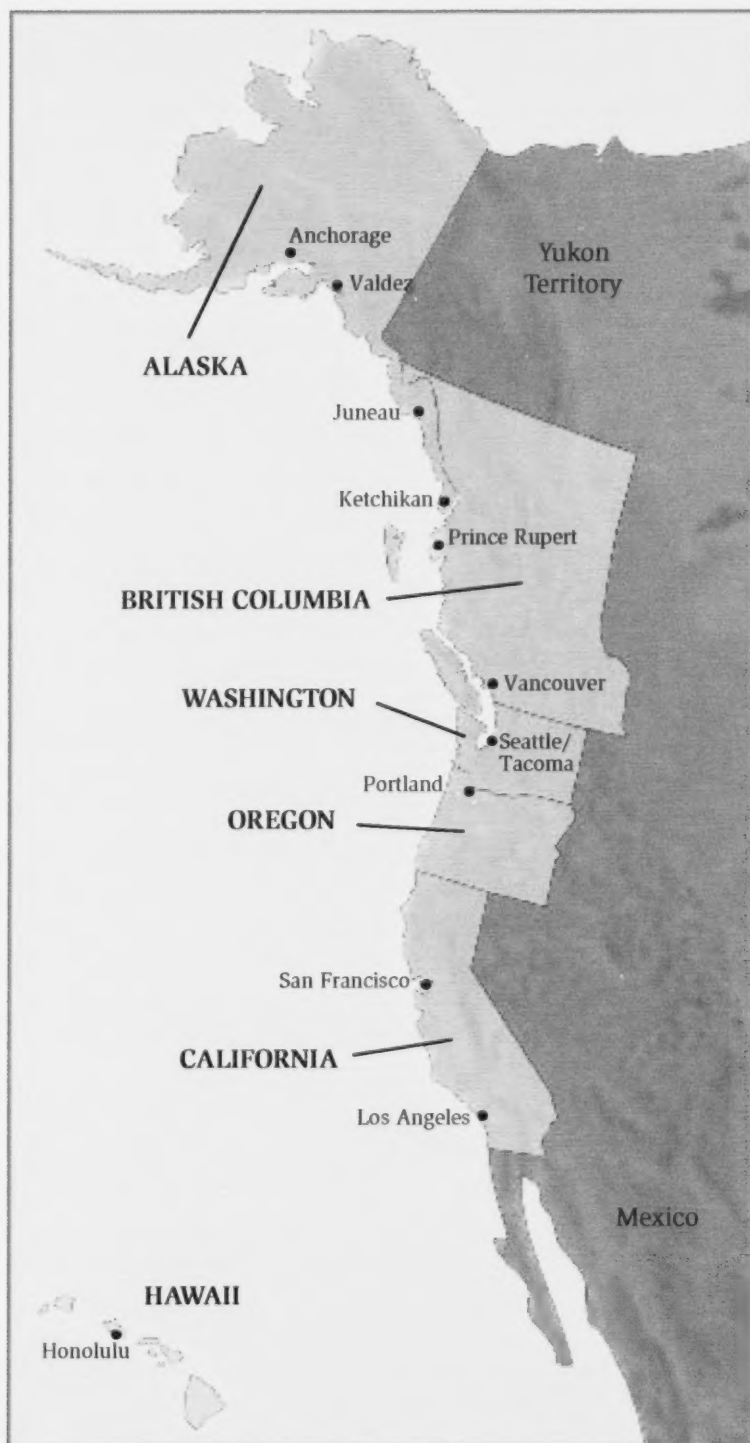
---

COVER: *Least Terns, photo courtesy of Teddy Llovet*





## PACIFIC STATES/BRITISH COLUMBIA OIL SPILL TASK FORCE



The states of Alaska, Washington, Oregon, California and Hawaii have joined with the Province of British Columbia in order to combine resources and coordinate efforts to protect their shared waters and 56,660 miles of sensitive coastlines from the devastating impacts of oil spills.



This Annual Report of the Pacific States/British Columbia Oil Spill Task Force is submitted to the Governors of California, Oregon, Washington, Hawaii and Alaska, and to the Premier of British Columbia, as well as to the citizens whom they represent. It provides information on the activities and accomplishments of the Task Force and its member agencies from August 2011 through May 2012.

The States/British Columbia Oil Spill Task Force was established by a Memorandum of Cooperation signed in 1989, following two West Coast oil spill incidents. The first involved the tank barge *Nestucca*, which spilled oil impacting the coasts of Washington and British Columbia in December of 1988. The second incident was the catastrophic spill by the T/V *Exxon Valdez* in Alaska's Prince William Sound in March of 1989. These events highlighted common concerns shared by West Coast states and the Province of British Columbia related to spill risks from coastal vessel traffic, the need for cooperation across shared borders and a shared commitment among West Coast citizens of both the U.S. and Canada to protect their unique marine resources.

The Oil Spill Task Force produced a report in October of 1990 that included 46 joint recommendations for spill prevention and response, as well as recommendations specific to each member's jurisdiction. Most of these recommendations have since been incorporated into state or provincial statutes, rules, or programs. They are also reflected in the U.S.

Federal Oil Pollution Act passed in 1990 (OPA '90), as well as the Canadian Shipping Act Amendments adopted in 1993.

When the State of Hawaii authorized its Department of Health, Environmental Health Division, to join the Task Force in 2001, the governing Memorandum of Cooperation was updated and signed by Hawaii Governor Benjamin Cayetano, Alaska Governor Tony Knowles, Washington Governor Gary Locke, Oregon Governor John Kitzhaber, California Governor Gray Davis and Gordon Campbell, Premier of British Columbia. The organization's name was changed to the Pacific States/British Columbia Oil Spill Task Force.

The continuing focus of the Oil Spill Task Force is on fostering regulatory compatibility, sharing information and resources, and coordinating regional projects to improve oil spill prevention, preparedness, and response in the shared Pacific waters of the U.S. and Canada. These efforts are guided by our Strategic Plan and Annual Work Plans and are based on our Mission, Goals, and Objectives as stated on the following page.



This Annual Report does not reflect oil spill prevention and response activities on the part of any federal agencies or industry organizations except as may have occurred in response to or in cooperation with the Pacific States/British Columbia Oil Spill Task Force or a member agency.



## VISION, MISSION, GOALS and OBJECTIVES

---

### *Long Term Vision Statement:*

No Spilled Oil.

### *Mission Statement:*

The mission of the Oil Spill Task Force is to strengthen state and Provincial abilities to prevent, prepare for and respond to oil spills.

### *Ongoing Goals:*

Prevent spills that impact natural resources in our member jurisdictions, both large spills with significant impacts and chronic small spills with cumulative impacts.

Facilitate communication among member agencies in order to promote policy uniformity and consistency, improve prevention, preparedness, response, and recovery capabilities, and maximize efficiency of effort by sharing ideas and "products";

Clarify the roles and responsibilities of state and provincial agencies with regard to federal agencies in order to reduce regulatory gaps and overlaps while avoiding potential conflicts;

Advocate in national and international arenas on issues of common concern, building respect through credibility, clarity of purpose and collaboration;

Serve as a catalyst for improvements by working cooperatively with federal agencies, other states and provinces, industry, response contractors, public interest groups and concerned citizens to create opportunities for policy and technology breakthroughs;

Educate the public and stakeholders on the impacts of oil spills and issues relating to spill prevention, preparedness, response and restoration;

Identify emerging trends in oil transportation, production and storage in order to assist member agencies with their strategic planning; and

Serve as a model of proactive regional cooperation and coordination.

### *Objectives:*

**Spill Prevention:** To prevent oil spills from a variety of sources, including vessels, pipelines, facilities, vehicles and railroads.

**Spill Preparedness and Response:** To enhance oil spill preparedness and response capabilities throughout our region.

**Communications:** To continuously improve communications within the Task Force as well as with key stakeholders and the general public and to maintain a high level of public and stakeholder involvement in Task Force activities.



### *Task Force Members*

**SCOTT SCHAEFER (2010-2012)**

ACTING ADMINISTRATOR, Office of Spill  
Prevention and Response, California  
Department of Fish and Game

**LARRY HARTIG (2007-2012)**

COMMISSIONER, Alaska Department of  
Environmental Conservation

**CAIRINE MACDONALD (2010-2012)**

DEPUTY MINISTER, British Columbia Ministry  
of Environment

**GARY GILL (2010-2012)**

DEPUTY DIRECTOR for Environmental Health,  
Hawaii Department of Health

**DALE JENSEN (2010-2012)**

MANAGER, Spills Program,  
Washington Department of Ecology

**DICK PEDERSEN (2007-2012)**

DIRECTOR, Oregon Department of  
Environmental Quality

### *Coordinating Committee Members:*

**LARRY DIETRICK (1999-2012)**

(Alternates: BETTY SCHORR AND GARY FOLLEY)  
Alaska Department of Environmental  
Conservation

**GRAHAM KNOX (2006-2012)**

British Columbia Ministry of Environment

**CURTIS MARTIN (2001-2012)**

Hawaii Department of Health

**NHI IRWIN (2011-2012)**

(Alternate: JON NEEL)  
Washington Department of Ecology

**SCOTT SCHAEFER (2000-2004, 2009-2012)**

Office of Spill Prevention and Response,  
California Department of Fish and Game

**MIKE ZOLLITSCH (1997-2012)**

Oregon Department of  
Environmental Quality

### *Executive Coordinator:*

**JEAN CAMERON (1993-2012)**

Pacific States/British Columbia  
Oil Spill Task Force

**SARAH BRACE (JULY 2012)**

Pacific States/British Columbia  
Oil Spill Task Force



# 1989-2012

## OIL SPILL TASK FORCE **TWENTY-THREE YEARS OF ACCOMPLISHMENTS**

### INITIAL REPORT

The Oil Spill Task Force produced a report in October of **1990** that included 46 joint recommendations for spill prevention and response, as well as recommendations specific to each member's jurisdiction.

### OIL SPILL PREVENTION INITIATIVES

Recommendations regarding Training and Standards to minimize human errors were adopted in **1995**.

A review of West Coast pilotage and recommendations to improve pilotage safety were completed in **1997**.

A survey of state/federal pipeline spill prevention standards to identify regulatory gaps and overlaps was completed in **1998**; recommendations for interagency coordination to improve pipeline spill prevention were made in **1999**.

The Task Force partnered with the U.S. Coast Guard and Canadian authorities to sponsor a stakeholder workgroup that assessed the oil spill risks associated with offshore vessel traffic on the west coast and, in **2002**, this West Coast Offshore Vessel Traffic Risk Management Project workgroup recommended a number of steps to reduce that risk, including voluntary minimum distances from shore for coastwise vessel traffic.

The Task Force worked with tank vessel operators in **2003** to rank voluntary practices that help prevent oil spills. We have done educational outreach regarding these "Best Industry Practices" to both the commercial vessel and tug/tank barge industries.

A review of the status of implementation of the 2002 West Coast Offshore Vessel Traffic Risk Management Project recommendations was conducted in 2007; new recommendations generated by a stakeholder workgroup were adopted in **2008**.

We established a web page for West Coast Harbor Safety Committees in **2009**.

We tracked the double-hull conversion status of tankers in the Trans-Alaska Pipeline (TAPS) trade from **2003-2010**. All TAPS tankers are now double-hulled.

In **2010** and **2011**, the U.S. Coast Guard (USCG) Pacific Area tracked coastwise vessel traffic patterns at our request; the USCG determined that approximately 96% were observing the distances offshore recommended by the West Coast Offshore

Vessel Traffic Risk Management Workgroup in 2002.

In **2011**, the Task Force initiated the first annual Summit of Harbor Safety Committees in our member jurisdictions. We also established and maintain a listserve for the Harbor Safety Committee Chairs to assist them in sharing Best Maritime Practices.

In **2012**, we initiated a project to produce a video with regional guidelines for best practices during bunkering operations.

**Ongoing since 2002:** the Task Force has collected data on spills of one barrel or larger in the West Coast states, and uses a common Data Dictionary to ensure standardized entries. We also sponsor investigator training every two years or as needed.

**Ongoing:** We support the Pacific Oil Spill Prevention Education Team (POSPET) whose members conduct spill prevention outreach to recreational boaters and marinas. The Task Force provides staff support, a web page, a listserve and funding for outreach materials.

**Ongoing:** Our member agencies share information on vessels of concern transiting between jurisdictions. We also ask for periodic reports from the U.S. Coast Guard Pacific Area regarding their Critical Area Inspection Program results for the TAPS tankers.

### OIL SPILL PREPAREDNESS/RESPONSE INITIATIVES

The Task Force adopted a Mutual Aid Plan in **1993** to facilitate sharing member agency staff and resources.

A comparison of contingency plan requirements for vessels and facilities was completed in **1995** and was updated in 2009. This is available on our website.

Recommendations regarding policies governing the use of alternative response technologies such as in-situ burning and dispersants were adopted in **1995** and the status of such policies is continuously reviewed by the Task Force.

A review of oiled wildlife care facilities on the West Coast was completed in **1995**.

We adopted a Mutual Aid Agreement in **1996** that outlines protocols for releasing private sector equipment cited in approved contingency plans for the purpose of Mutual Aid. The Task Force Members updated that Mutual Aid Agreement in **2011** with an emphasis on building regional self-reliance.





In 1997 we adopted a voluntary Integrated Vessel Response Plan (IVRP) format based on the key elements of the U.S. Coast Guard's Vessel Response Plan. This format allows correlation with west coast state planning requirements as well as with the Shipboard Oil Pollution Emergency Plan (SOPEP) required by Transport Canada. A subsequent Task Force Agreement to accept vessel contingency plans in a format that integrates both state and federal planning requirements was adopted in 1998.

A subsequent Task Force Agreement to accept vessel contingency plans in a format that integrates both state and federal planning requirements was adopted in 1998.

Recommended protocols for oiled bird and marine mammal rescue and rehabilitation were published in 1998.

The Task Force partnered with the U.S. Coast Guard to sponsor a stakeholder workgroup which updated the Oil Spill Field Operations Guide, effective 2000.

A set of updated and simplified "Recommended Contingency Planning Elements" was adopted by the Task Force members in 2003.

In partnership with the U.S. Coast Guard and a stakeholder workgroup, we developed guidelines for decision-making in response to vessel requests of a Place of Refuge in 2005.

We developed Area Committee planning guidelines for Volunteer Management in 2008.

We sponsored a webinar on using Social Media during a spill response in April 2009.

We completed a comprehensive review of oil spill planning and preparedness along the two U.S./Canadian borders in our region and produced a report with 111 recommendations for improvements in 2011.

**Ongoing:** Member jurisdictions along the West Coast require oil spill contingency plans for nontank vessels. We also support U.S. Coast Guard adoption of contingency plan regulations for nontank vessels.

**Ongoing:** A table illustrating the Financial Responsibility requirements of member agencies is maintained on the Task Force website.

**Ongoing:** We advocate for increasing the Limits of Liability for both vessels and facilities in order to protect the U.S. Oil Spill Liability Trust Fund.

**Ongoing:** We monitor developments in the use of

the Incident Command System as a response paradigm in order to advance the interests of our member agencies and promote improved training concepts.

**Ongoing:** The Task Force maintains an easy-to-remember oil spill reporting number (1-800-OILS-911) for use by recreational and fishing vessels operating from British Columbia to California.

**Ongoing:** We regularly monitor oil spill research and development of new technologies and advocate for research priorities. We formed an Oil Spill Research and Development Workgroup in 2009 that meets by conference call to provide updates on oil spill R&D projects.

**Ongoing since 2009:** We formed an Oil Spill Research and Development Workgroup that meets annually by conference call to provide updates on oil spill R&D projects. Summary notes from these calls - with links to R&D project descriptions - are available on our website.

#### COMMUNICATIONS INITIATIVES

The Task Force was created in 1989 by a Memorandum of Cooperation signed by the Governors of Alaska, Washington, Oregon and California and the Premier of British Columbia. A second Memorandum of Cooperation was signed by the Governors and Premier in 2001 when the State of Hawaii joined the Pacific States/British Columbia Oil Spill Task Force.

The Legacy Awards Program has been ongoing since 1999, honoring groups or individuals who go beyond regulatory requirements to improve oil spill prevention, preparedness and response.

The Task Force signed a partnership Memorandum of Understanding with the U.S. Coast Guard Pacific Area in May of 2008. The Coordinating Committee meets annually with Pacific Area representatives as a "Steering Committee" to implement this MOU. Representatives of the U.S. EPA have been invited to join this meeting as well.

**Ongoing:** A Task Force website is available at <http://www.oilspilltaskforce.org>.

**Ongoing:** We maintain contact information on our website for our project "points of contact" in each member agency, as well as links to member agency information on incident responses on our website.

**Ongoing:** The Task Force hosts a one-day Annual



1989-2012

OIL SPILL TASK FORCE **TWENTY-THREE YEARS OF ACCOMPLISHMENTS**

---

Meeting, open to the public and rotated among our member jurisdictions, every other year.

**Ongoing:** The Task Force hosts a multi-day "Clean Pacific" conference, also rotated among our member jurisdictions, every other year.

**Ongoing:** The Task Force has sponsored public roundtable discussions on Spill Response Readiness, Natural Resource Damage Assessments, Spills from Trucks, Green Ports, Places of Refuge, response in low-visibility conditions and Cruise Ship Pollution.

**Ongoing:** Stakeholder participation is encouraged in Task Force Annual Meetings, at the Clean Pacific Conferences and at Roundtables, as well as in project workgroups as appropriate.

**Ongoing:** We produce an Annual Report which includes updates on Task Force and Member Agency activities as well as the spill data for the preceding year.

**Ongoing:** We participate in the trustee/industry Joint Assessment Team's efforts to coordinate natural resource damage assessments and restoration.

**Ongoing:** The Task Force provides comments on U.S. and Canadian regulatory initiatives of interest to our members.

**Ongoing:** We have identified Points of Contact in other coastal states and provinces for information sharing.

**Ongoing:** The Task Force Members meet annually; the Coordinating Committee members meet at least quarterly, either in person or by conference call.

**Ongoing:** Task Force staff facilitates internal communication and information exchange among member agencies.

**Ongoing:** We regularly share information on spill prevention, preparedness and response Topics of Concern among member agencies.

**Ongoing:** The Task Force Executive Coordinator responds to information requests and represents the Task Force at meetings, workshops and conferences as time and budgets allow.

**Ongoing:** We operate pursuant to multi-year Strategic Plans that are implemented through Annual Work Plans.

1989-2012

OIL SPILL TASK FORCE **TWENTY-THREE YEARS OF ACCOMPLISHMENTS**



*Mossy Rocks at Pismo Beach*





FROM THE EXECUTIVE COORDINATOR

---



*Dear Reader,*

*Please study this photo carefully. I know I should not use a picture where my eyes are hidden behind sunglasses, but that's not the point. See the grey streak in my hair? That explains one reason why I'm retiring as of July 1, 2012 – it's TIME! See the big smile as the wind blows through my hair while I'm traveling on a boat? That also explains why I'm retiring! It's TIME to reinvent myself as a person with TIME - to do the things I love, to be active and creative, and to be more involved in my community.*

*Not that the past nineteen years of coordinating the Pacific States/British Columbia Oil Spill Task Force haven't been gratifying! The variety of projects and issues has been stimulating. The variety of people that I've gotten to know and work with – from both the public and private sectors and multiple countries – has been very rewarding, as I learned new skills and perspectives from them. And the commitment of the Task Force member agencies over the years has been unique and extremely impressive.*



*On no other coast of the U.S. or Canada do agencies from multiple jurisdictions consistently commit both funding and staff time to a regional effort of this kind. Besides contributing to the costs of an Executive Coordinator, each member agency provides staff support in a variety of formats covering a wide range of projects and initiatives. Their reward comes through improving their own performance as a result of information sharing and coordination, as well as through improving their opportunities to coordinate with regional stakeholders to address common concerns.*

*I have been very fortunate to serve as their spokesperson as well as their staff person. I am quite certain that their next Executive Coordinator will also appreciate the unique opportunity presented by the Pacific States/British Columbia Oil Spill Task Force. I am also certain that he or she will bring new skills, a new vision, and new energy and creativity to the position.*

*My sincerest thanks go to the Task Force Members and the Coordinating Committee members – as well as to all the wonderful stakeholders I've been fortunate to work with over the years – for your past, present and future commitment to this unique regional effort. That future commitment is crucial, for many challenges lie ahead. As long as all the players are willing to work together in a search for answers rather than glory – then solid, lasting, solutions will be found.*

*Sincerely,*

*Jean R. Cameron*  
Executive Coordinator



2011-2012 IN REVIEW:  
OIL SPILL TASK FORCE ACTIVITIES AND ACCOMPLISHMENTS

## SPILL PREVENTION PROJECTS

### COLLECTING SPILL DATA

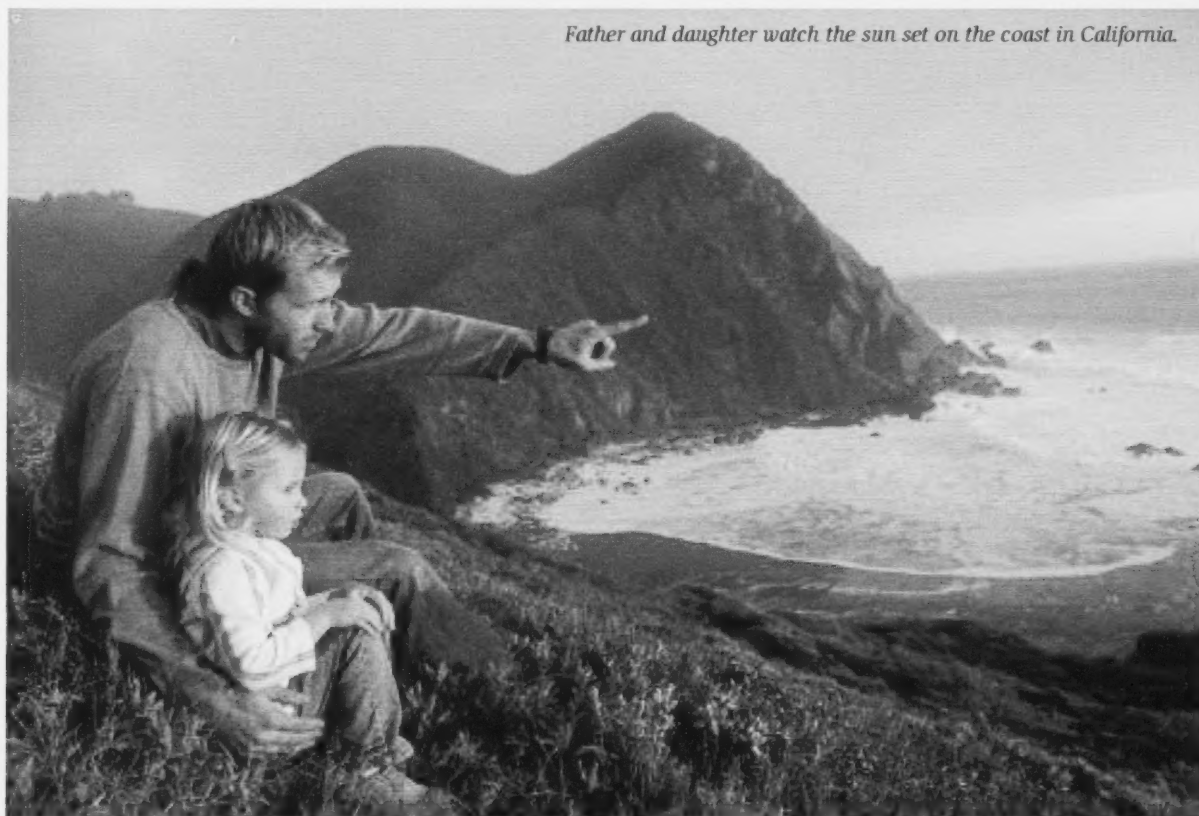
The Task Force's regional oil spill database was initiated in 2003 with the collection of the 2002 data. Each subsequent year our Annual Report has included a compilation and analysis of regional data from the prior year. Our ongoing goal is continuous improvement of this database in order to provide information on spill trends and causal factors; this allows us to better target our spill prevention efforts. In addition to the 2011 data in this Annual Report, spill data from 2002 – 2010 is available in the Annual Reports at [www.oilspilltaskforce.org](http://www.oilspilltaskforce.org).

The Database Workgroup is chaired by Camille Stevens of the Alaska Department of Environmental Conservation; Camille also compiles the information supplied by other member agencies and produces

the final graphics after Workgroup review. The Data Workgroup members include Cathy Conway, Adrian Chatigny and Damon Williams of the California Office of Spill Prevention and Response; Mike Zollitsch of the Oregon Department of Environmental Quality; Marcia Graf and Curtis Martin of the Hawaii Office of Hazard Evaluation and Emergency Response; and Jack Barfield of the Washington Department of Ecology. The British Columbia Ministry of Environment monitors the project, is developing a spill database, and plans to join the Task Force project as soon as possible.

Only spills of one barrel or larger are included in our Database. The Database Workgroup endeavors to refine data submittals consistent with the Task Force

*Father and daughter watch the sun set on the coast in California.*





Data Dictionary (available on our website), with particular emphasis on reducing the amount of data categorized as "other" or "unknown." It is an ongoing challenge to refine information entered into the database to a level of specificity that supports effective analysis while also conforming to the varied collection capabilities of member agencies.

The 2011 data is provided on the following pages. Highlights include:

- A total of 1,075 releases occurred during 2011, with a total volume of 514,794 gallons spilled. Of these, only four releases were larger than 10,000 gallons.
- 947 releases were non-crude spills totaling 441,790 gallons. For the non-crude spills:
  - Vehicles (60%) and Facilities (23%) were the major sources during 2011;
  - 53% of the total volume was attributed to Equipment Failure and Human Error (30%); and
  - 72% of the non-crude volume was spilled to Land.
- Crude oil comprised 14% the total volume for 2011 (73,004 gallons). Equipment Failure (72%) was the predominant cause of crude oil spills during 2011 and Inattention was the cause of 94% of all Human Error-caused crude oil spills.

We note that California's spill volumes often exceed that from other West Coast states; this reflects the fact that California faces several unique challenges. California is our largest state, with the most population of all our member jurisdictions; this results in more transportation of petroleum products as well as the most overall vehicle usage. California is also a state where oil is both produced and refined, which further increases the risk of spills. In addition, there are some inland producers with aging or poorly maintained pipeline infrastructure, which has driven up the number of spills to land in recent years.

The 2002-2011 data provides us with an opportunity to look at ten-year trends, which are also shown in this report. Here are the highlights:

- A total of 9,680 releases occurred during the 10-year period, with a total volume of approximately 8.5 million gallons.
- There were 103 spills greater than 10,000 gallons (28 crude and 75 non-crude).
- Over that 10-year period, the combined volume of Non-Crude spills was more than twice that for Crude Oil spills.
- The top two Crude Oil spills during the 10-year period were 463,848 gallons in California (2008) and a 267,000 gallon spill in Alaska (2006). The combined volume of these two incidents comprised 29% of the total Crude Oil volume released for the period.
- Overall, Facilities (49%) and Pipelines (23%) were the major sources of spills during the 10-year period.
- Equipment Failure (57%) and Human Error (31%) were the major spill causes overall.

The Oil Spill Task Force database is created and maintained for information purposes only. The data represents the respective agencies' best information at the time it was entered into the database, although recorded quantities are often under-reported. Each agency that assists in the creation and maintenance of the Task Force database in no way guarantees the accuracy of the information and no guarantee of accuracy shall be expressed or implied.



2011-2012 IN REVIEW:

OIL SPILL TASK FORCE ACTIVITIES AND ACCOMPLISHMENTS

**2011 ANNUAL SUMMARY  
OF SPILLS**

- A total of 1,075 releases occurred during 2011, with a total volume of 514,794 gallons.

**SUMMARY OF RELEASES BY PRODUCT (2011)**

PRODUCT	COUNT	GALLONS	% TOTAL VOL.
Diesel Oil	536	122,084	23.7%
Other	13	117,322	22.8%
Crude Oil	128	73,004	14.2%
Kerosene / Jet Fuel	33	43,331	8.4%
Gasoline	38	33,821	6.6%
Mineral Oil / Transformer Oil	138	30,109	5.8%
Unknown	7	22,450	4.4%
Bunker C / IFO / HFO	5	17,301	3.4%
Waste Oil	31	15,507	3.0%
Lube Oil / Motor oil	37	10,708	2.1%
Asphalt / Creosote	10	9,648	1.9%
Edible / Vegetable Oil	6	7,045	1.4%
Hydraulic Oil	56	5,729	1.1%
Oily Water Mixture	21	3,267	0.6%
Aviation Fuel	8	2,203	0.4%
Heating Oil	8	1,265	0.2%
<b>TOTAL</b>	<b>1,075</b>	<b>514,794</b>	



**SPILLS GREATER THAN 10,000 GALLONS (2011)**

PRODUCT	VOL.	STATE	DATE	SOURCE TYPE	CAUSE TYPE	MEDIUM
Other*	112,000	OR	05/04/11	Vehicle	Equipment Failure	Land
Kerosene / Jet Fuel	22,388	CA	05/18/11	Vehicle	Unknown	Marine
Unknown	21,000	OR	01/13/11	Vehicle	Equipment Failure	Land
Bunker C/IFO/HFO	17,000	CA	09/14/11	Private Property	Equipment Failure	Marine
Diesel Oil	14,000	HI	11/01/11	Vessel	Equipment Failure	Land
*biofuel (ethanol)						





2011-2012 IN REVIEW:  
OIL SPILL TASK FORCE ACTIVITIES AND ACCOMPLISHMENTS

## 2011 NON-CRUDE SPILLS

Total Spills	947
Total Volume (gal)	441,790
Average Spill Size (gal)	467

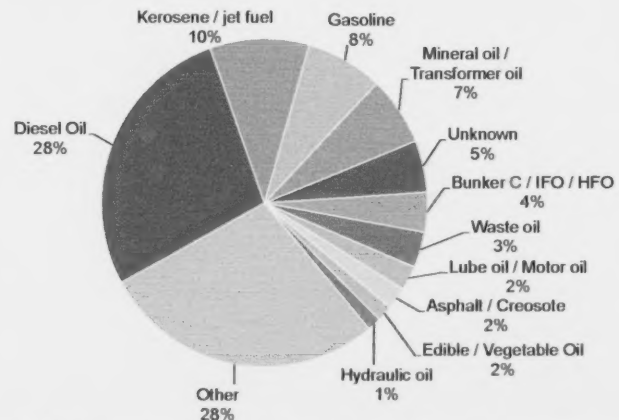
### SUMMARY BY PRODUCT:

#### Top Products

Product	Gallons
Diesel Oil	122,084
Other	117,322
Kerosene / Jet Fuel	43,331
Gasoline	33,821
Mineral/Transformer Oil	30,109

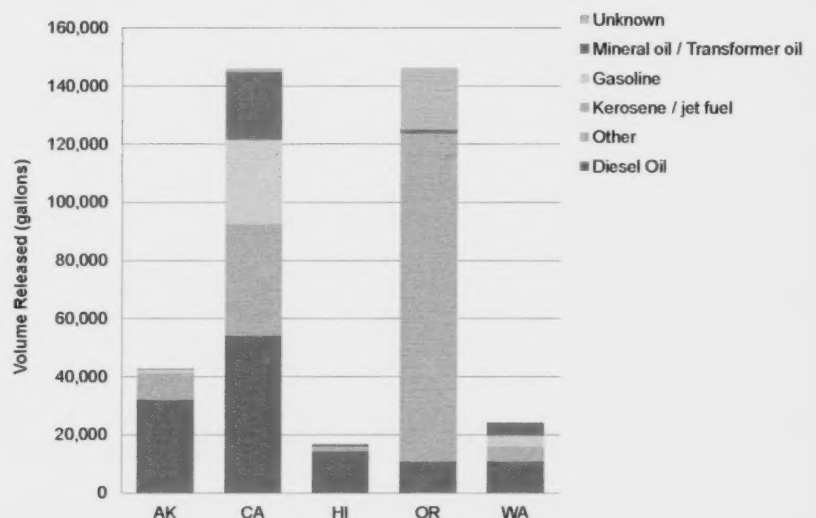
- 947 non-crude spills totalling 441,790 gallons occurred during 2011.
- Diesel and Other comprised more than half of the total non-crude spill volume.
- Most of the spill volume classified as Other resulted from a 112,000 gallon biofuel spill in Oregon (biofuel must be denatured with gasoline in order to be classified as a petroleum product in this database).

## NON-CRUDE SPILLS BY PRODUCT, ALL STATES (2011) (percent total volume)



NOTE: For graphing purposes, besides biofuel, "Other" includes products comprising 1% or less of the total volume released: Oily Water Mixture, Aviation Fuel and Heating Oil

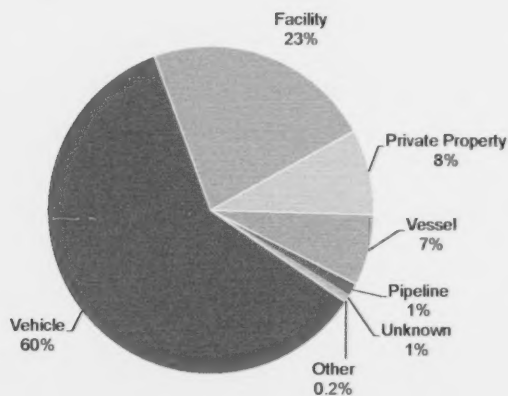
## NON-CRUDE SPILLS BY PRODUCT AND STATE (2011) (5% or more total volume)



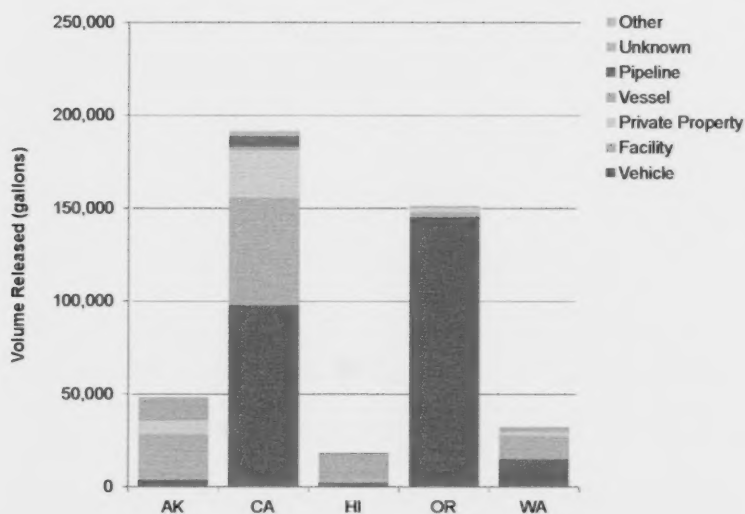


### NON-CRUDE SPILLS BY SOURCE, ALL STATES (2011)

(percent total volume)



### NON-CRUDE SPILLS BY SOURCE AND STATE (2011)



### 2011 NON-CRUDE SPILLS

#### SUMMARY BY SOURCE:

##### Top Sources

Source	Gallons
Vehicle	264,809
Facility	99,754
Private Property	37,333
Vessel	30,937
Unknown	5,774

- Vehicles (60%) and Facilities (23%) were the major sources of non-crude spills during 2011.
- Vehicles were the major source of for non-crude spills over 10,000 gallons.





2011-2012 IN REVIEW:  
OIL SPILL TASK FORCE ACTIVITIES AND ACCOMPLISHMENTS

## 2011 NON-CRUDE SPILLS

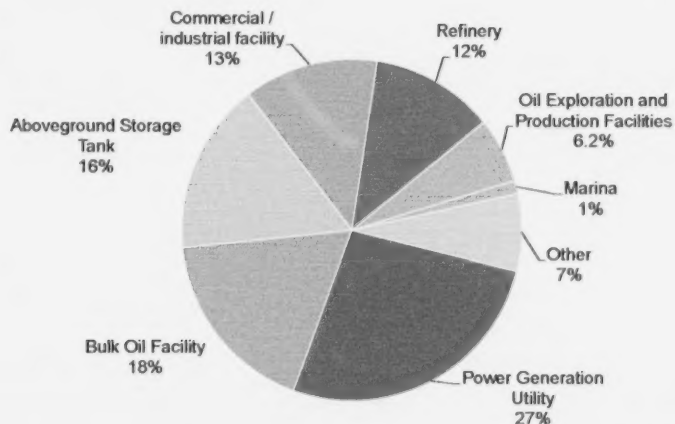
### SUMMARY BY SOURCE:

(continued)

- Power Generation Facilities (27%) were the top contributors to facility spills.
- Spills from Commercial Trucks and Trains comprised over 70% of the vehicle spill volume. Nearly half of the vehicle spill volume resulted from a single 112,000 gallon biofuel release in Oregon.

### NON-CRUDE SPILLS – FACILITY DETAIL (2011)

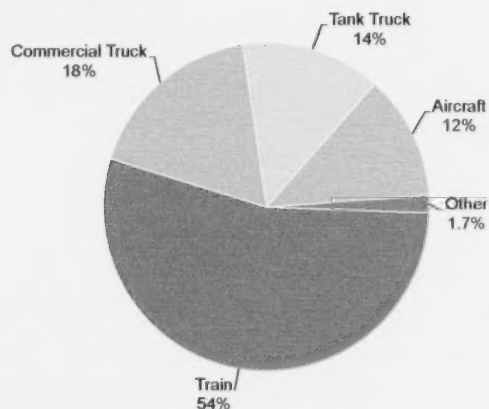
(percent total volume)



NOTE: For graphing purposes, "Other" includes Facility classifications comprising less than 1% of the total volume released: Retail petroleum outlet, Leaking Drum or Container, and Underground Storage Tank

### NON-CRUDE SPILLS – VEHICLE DETAIL (2011)

(percent total volume)



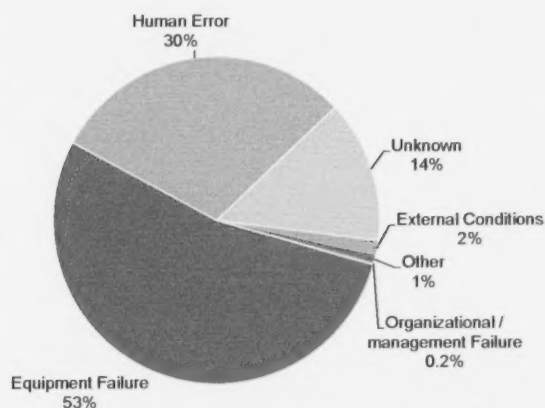
NOTE: For graphing purposes, "Other" includes Non-commercial Vehicle and Construction/Utility Vehicle



## 2011 NON-CRUDE SPILLS

### NON-CRUDE SPILLS BY CAUSE, ALL STATES (2011)

(percent total volume)



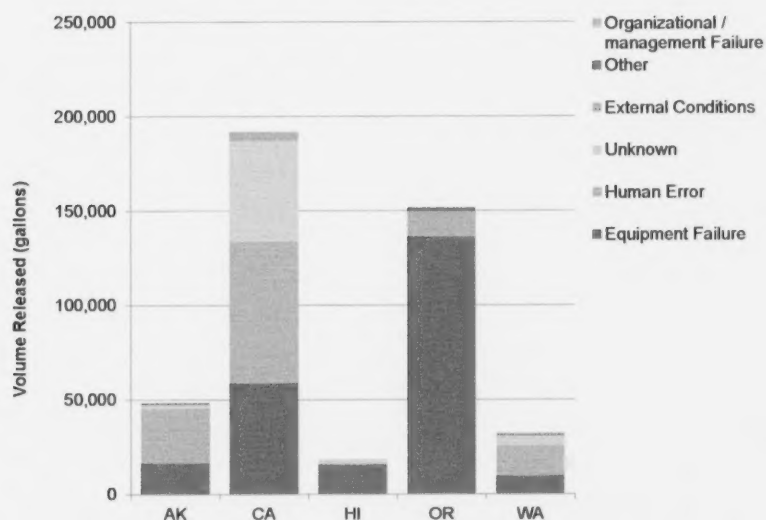
### SUMMARY BY CAUSE:

#### Top Causes

Cause	Gallons
Equipment Failure	236,163
Human Error	132,828
Unknown	62,046
External Conditions	6,801
Other	3,252

- 83% of the total non-crude spill volume was attributed to Equipment Failure (53%) or Human Error (30%).

### NON-CRUDE SPILLS BY CAUSE AND STATE (2011)





2011-2012 IN REVIEW:  
OIL SPILL TASK FORCE ACTIVITIES AND ACCOMPLISHMENTS

## 2011 NON-CRUDE SPILLS

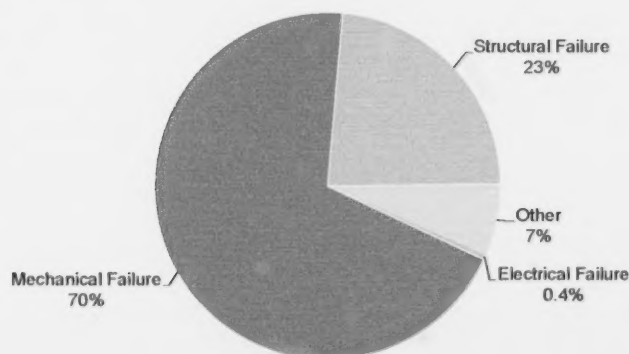
### SUMMARY BY CAUSE:

(continued)

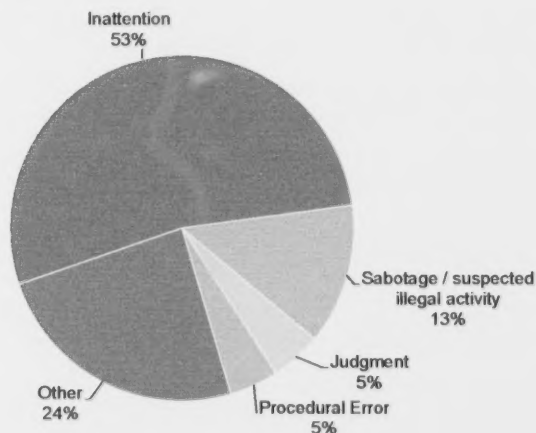
- More than two-thirds of Equipment Failure spills were due to Mechanical Failure (70%).

We note that 24% of the causal information detail for Human Error was recorded as "Other." This reflects the difficulties faced by our member agencies in tracking down more detail on human error causes for non-crude spills, since many are small, and many are also vehicles spills (12% of the "Human error/ Other" spills reported) for which other agencies are first responders.

### NON-CRUDE SPILLS – EQUIPMENT FAILURE DETAIL (2011) (percent total volume)



### NON-CRUDE SPILLS – HUMAN ERROR DETAIL (2011) (percent total volume)



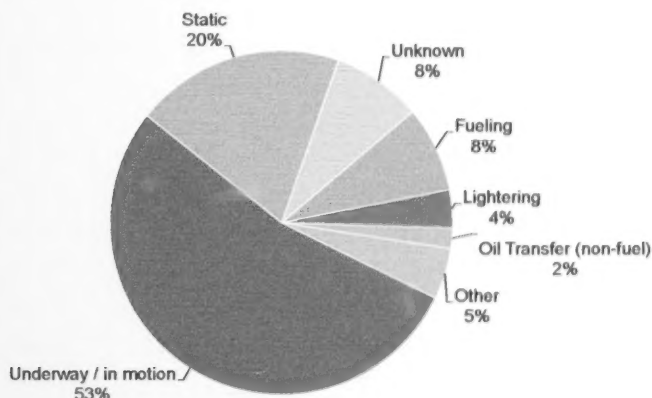
NOTE: For graphing purposes, "Other" includes: Deliberate Violation, Inaccurate computation, Improper Equipment Use, Inexperience, Fatigue, and Communications



## 2011 NON-CRUDE SPILLS

### NON-CRUDE SPILLS BY ACTIVITY (2011)

(percent total volume)



Other includes classifications with less than 5,000 gal spilled:  
Maintenance/Testing, Internal Transfer, Construction, Oil Transfer (Cargo),  
Tank/Hold Cleaning, Not operating, and Bilge Pumping

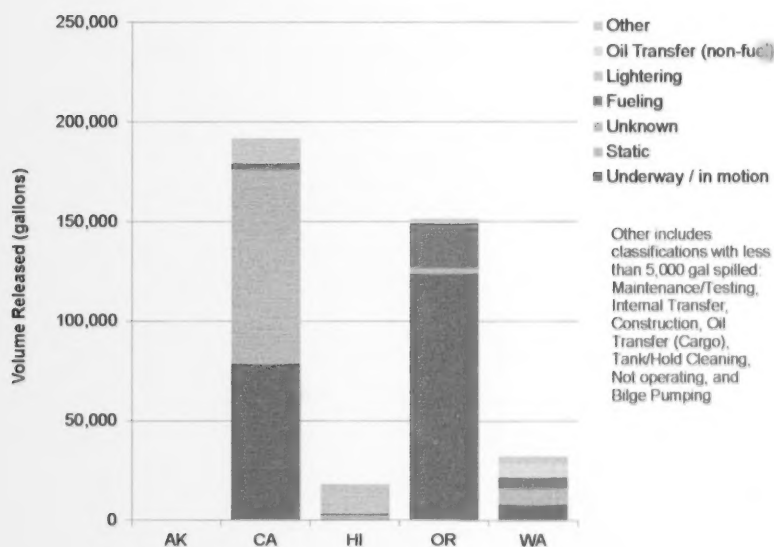
### SUMMARY BY ACTIVITY:

NOTE: Activity was not recorded for spills in Alaska.

Activity	Gallons
Underway/In Motion <sup>1</sup>	210,289
Static	77,578
Unknown	33,273
Fueling	31,785
Lightering	14,000

- Underway/In Motion was the main activity at the time of the spill (53%).

### NON-CRUDE SPILLS BY ACTIVITY AND STATE (2011)



<sup>1</sup>Underway/In Motion: (1) Vessel underway conducting normal operations, no oil movements in progress. Oil movements include ballasting, tank washing, internal transfers. (2) Vehicle in motion conducting designed function.



## 2011-2012 IN REVIEW:

### OIL SPILL TASK FORCE ACTIVITIES AND ACCOMPLISHMENTS

#### 2011 NON-CRUDE SPILLS

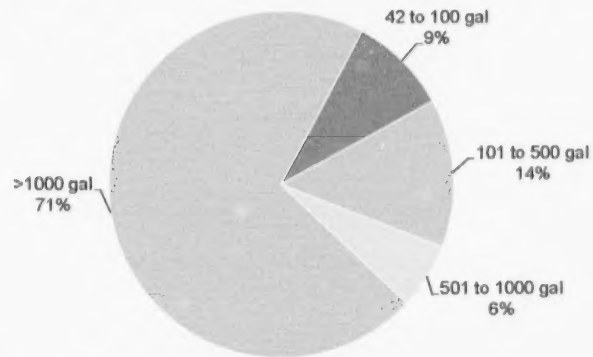
##### SUMMARY BY SPILL SIZE:

Size Class	Gallons
42 to 100 gal	41,016
101 to 500 gal	61,019
501 to 1000 gal	27,251
>1000 gal	312,504

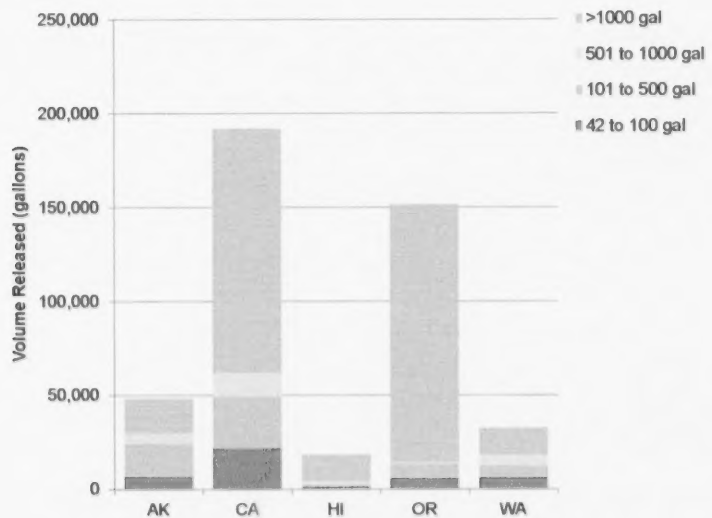
- 71% of the total non-crude spill volume was due to spills greater than 1,000 gallons.
- About a third of the combined volume of spills greater than 1,000 gallons was due to a single 112,000-gallon spill in Oregon.

#### NON-CRUDE SPILLS BY SPILL SIZE (2011)

(percent total volume)



#### NON-CRUDE SPILLS BY SPILL SIZE AND STATE (2011)

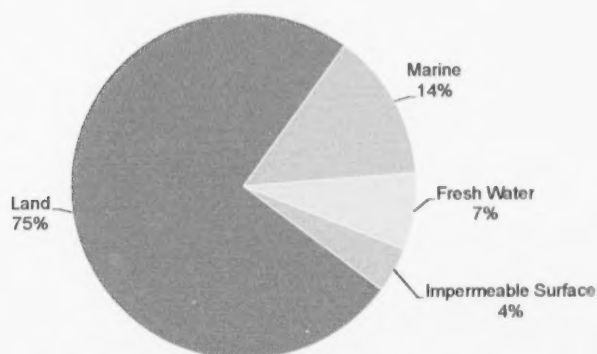




## 2011 NON-CRUDE SPILLS

### NON-CRUDE SPILLS BY MEDIUM IMPACTED (2011)

(percent total volume)

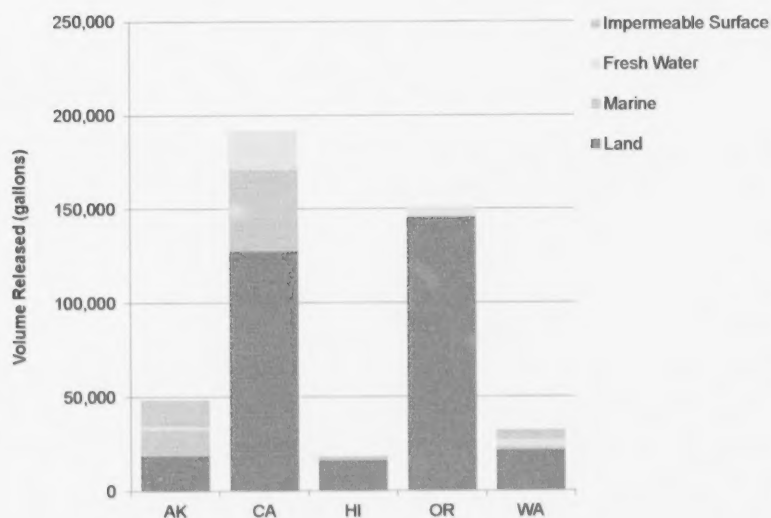


### SUMMARY BY MEDIUM:

Size Class	Gallons
Land	330,255
Marine	61,202
Fresh Water	31,536
Impermeable Surface	18,797

- Nearly three-quarters of the non-crude volume was spilled to Land (72%).

### NON-CRUDE SPILLS BY MEDIUM AND STATE (2011)





2011-2012 IN REVIEW:  
OIL SPILL TASK FORCE ACTIVITIES AND ACCOMPLISHMENTS

## 2011 CRUDE SPILLS

Total Spills	128
Total Volume (gal)	73,004
Average Spill Size (gal)	570

### SUMMARY:

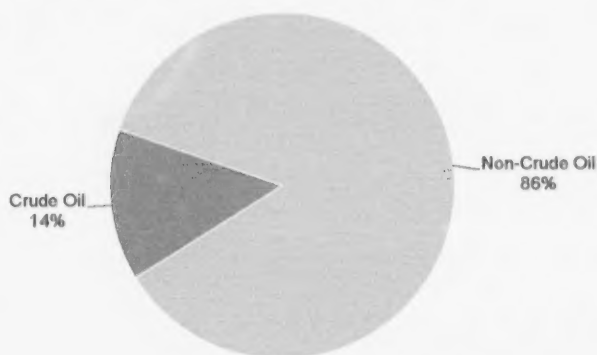
#### Product Type

Product	Gallons
Non-Crude Oil	441,790
Crude Oil	73,004
<b>Total</b>	<b>514,794</b>

- Crude Oil comprised 14% the total volume for 2011.

## CRUDE VS. NON-CRUDE SPILLS, ALL STATES (2011)

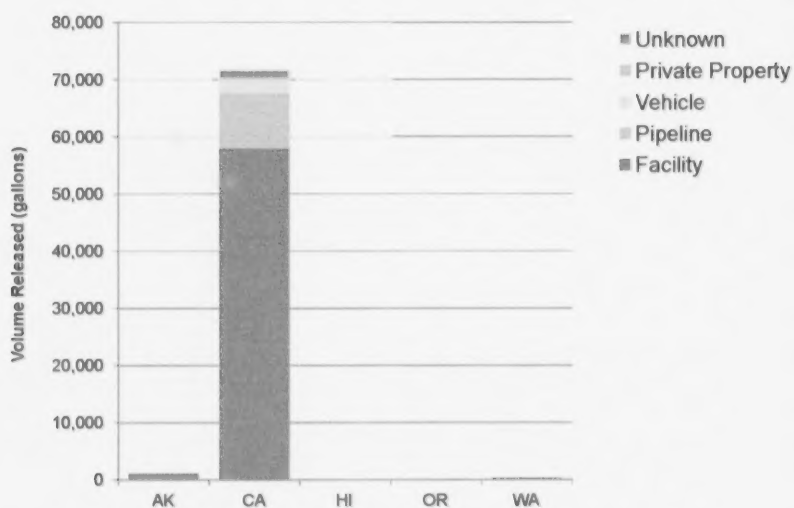
(percent total volume)



#### Top Sources

Source	Gallons
Facility	59,415
Pipeline	9,641
Vehicle	2,218
Unknown	1,465
Private Property	265

## CRUDE SPILLS BY SOURCE TYPE AND STATE (2011)

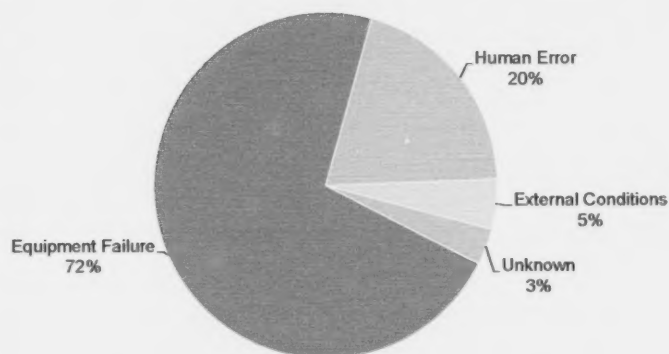






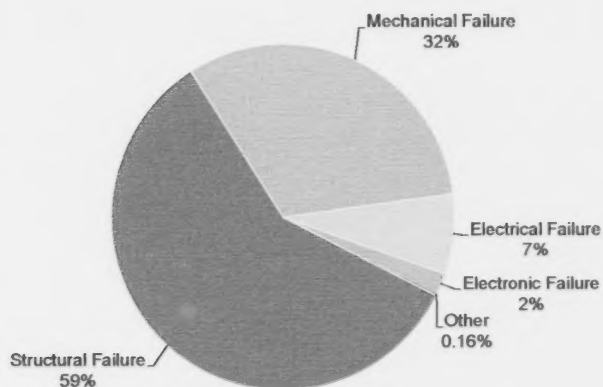
### CRUDE SPILLS BY CAUSE, ALL STATES (2011)

(percent total volume)



### CRUDE SPILLS – EQUIPMENT FAILURE DETAIL (2011)

(percent total volume)



### 2011 CRUDE SPILLS

#### SUMMARY BY CAUSE:

##### Top Causes

Cause	Gallons
Equipment Failure	52,450
Human Error	14,666
External Conditions	3,402
Unknown	2,486

- Equipment Failure (72%) was the predominant cause of crude oil spills during 2011.

##### Equipment Failure Detail

Cause	Gallons
Structural Failure	30,680
Mechanical Failure	16,706
Electrical Failure	3,930
Electronic Failure	1,050
Other	84

- Structural Failure (59%) was the main cause for spills due to Equipment Failure.





2011-2012 IN REVIEW:

OIL SPILL TASK FORCE ACTIVITIES AND ACCOMPLISHMENTS

## 2011 CRUDE SPILLS

### SUMMARY BY CAUSE:

(continued)

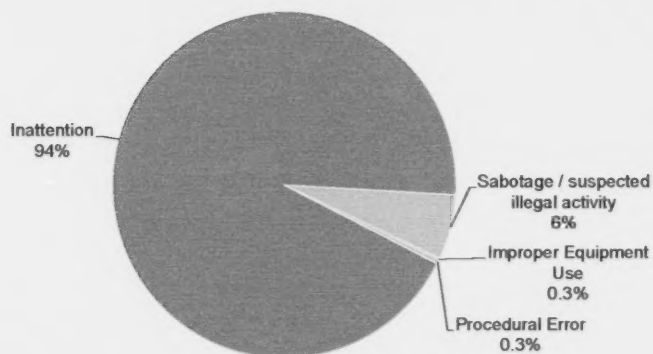
#### Human Error Detail

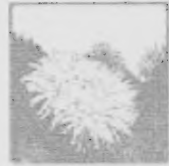
Cause	Gallons
Inattention	13,700
Sabotage / suspected illegal activity	882
Improper Equipment Use	42
Procedural Error	42

- Inattention (94%) was the cause of virtually all spills attributed to Human Error.

### CRUDE SPILLS – HUMAN ERROR DETAIL (2011)

(percent total volume)

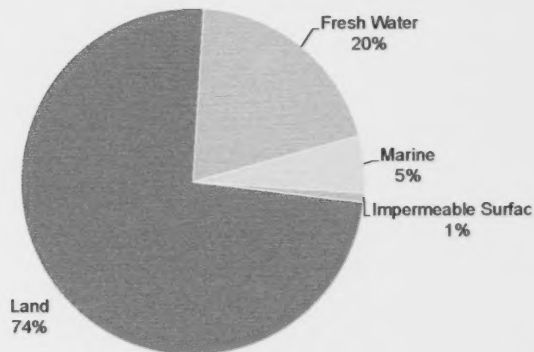




## 2011 CRUDE SPILLS

### CRUDE SPILLS BY MEDIUM IMPACTED (2011)

(percent total volume)



### SUMMARY BY MEDIUM:

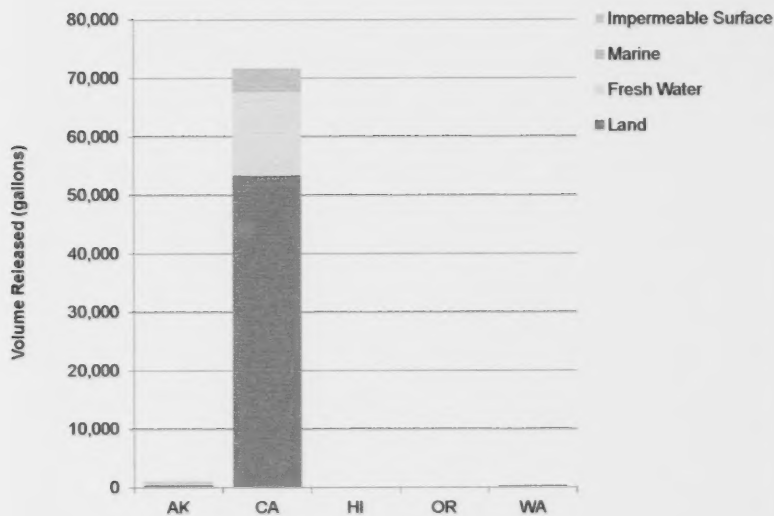
#### Top Causes

Medium	Gallons
Land	54,086
Fresh Water	14,411
Marine	3,880
Impermeable Surface	627

- During 2011, crude spills to Land (74%) comprised the highest percent total volume for all states.

### CRUDE SPILLS BY MEDIUM AND STATE (2011)

(percent total volume)





## 2011-2012 IN REVIEW:

### OIL SPILL TASK FORCE ACTIVITIES AND ACCOMPLISHMENTS

#### SUMMARY OF SPILLS (2002 - 2011)

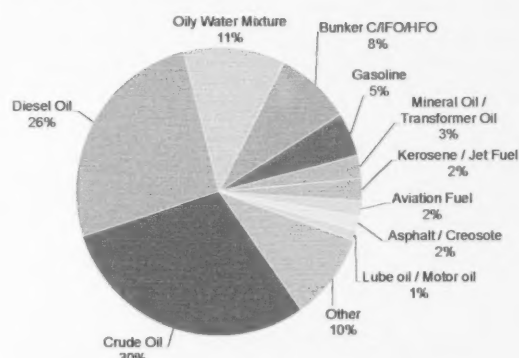
A total of 9,680 releases occurred during the 10-year period 2002-2011, with a total volume of approximately 8.5 million gallons.

#### RELEASES BY PRODUCT (2002 - 2011)

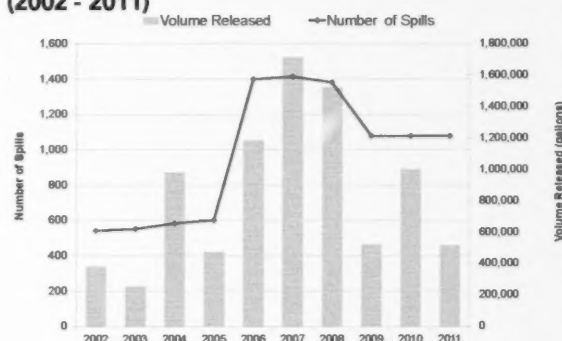
PRODUCT	COUNT	GALLONS	% TOTAL VOL
Crude Oil	1,132	2,534,613	29.7%
Diesel Oil	4,736	2,221,376	26.0%
Oily Water Mixture	363	982,862	11.5%
Bunker C/IFO/HFO	79	729,643	8.5%
Other	339	562,889	6.6%
Gasoline	350	421,272	4.9%
Mineral/Transformer Oil	891	220,808	2.6%
Kerosene / Jet Fuel	188	212,360	2.5%
Aviation Fuel	121	148,388	1.7%
Asphalt / Creosote	111	132,843	1.6%
Lube Oil / Motor oil	393	100,217	1.2%
Waste Oil	252	79,106	0.9%
Hydraulic Oil	475	62,166	0.7%
Unknown	70	61,976	0.7%
Heating Oil	132	32,470	0.4%
Edible / Vegetable Oil	35	24,114	0.3%
LNG / LPG	13	11,580	0.1%
<b>TOTAL</b>	<b>9,680</b>	<b>8,538,683</b>	

#### SPILLS BY PRODUCT (2002 - 2011)

(percent total volume)



#### NUMBER OF SPILLS AND VOLUME RELEASED (2002 - 2011)



#### SPILLS GREATER THAN 10,000 GALLONS (2002-2011)

PRODUCT	VOL.	STATE	DATE	SOURCE	CAUSE	MEDIUM
Crude Oil	463,848	CA	04/24/08	Pipeline	Equipment Failure	Land
Diesel Oil	420,000	CA	10/30/07	Facility	Equipment Failure	Land
Bunker C/IFO/HFO	321,052	AK	12/08/04	Vessel	Human Error	Marine
Bunker C/IFO/HFO	270,000	WA	08/25/04	Facility	Human Error	Land
Crude Oil	267,000	AK	03/02/06	Pipeline	Equipment Failure	Land
Other	193,200	CA	01/04/10	Facility	Equipment Failure	Land
Crude Oil	191,562	AK	05/25/10	Pipeline	Equipment Failure	Impermeable Surface
Diesel Oil	145,000	AK	03/23/08	Vessel	Human Error	Marine
Diesel Oil	142,800	AK	01/11/10	Facility	Human Error	Marine
Oily Water Mixture	128,000	Ca	11/26/08	Facility	Equipment Failure	Land
Crude Oil	126,000	CA	03/09/07	Facility	Equipment Failure	Land
Crude Oil	126,000	CA	03/23/05	Pipeline	External Conditions	Fresh Water
Aviation Fuel	115,353	CA	11/22/04	Pipeline	Equipment Failure	Land

Continued on next page



**SPILLS GREATER THAN 10,000 GALLONS (2002-2011)** Continued from page 26

PRODUCT	VOL.	STATE	DATE	SOURCE	CAUSE	MEDIUM
Other	112,000	OR	05/04/11	Vehicle	Equipment Failure	Land
Crude Oil	87,192	CA	01/10/07	Facility	Equipment Failure	Land
Crude Oil	63,000	CA	04/23/07	Facility	Equipment Failure	Land
Oily Water Mixture	63,000	CA	07/29/08	Facility	Unknown	Land
Diesel Oil	58,800	CA	07/07/07	Facility	Human Error	Land
Bunker C/IFO/HFO	58,000	CA	11/07/07	Vessel	Human Error	Marine
Crude Oil	42,000	CA	06/12/07	Pipeline	Equipment Failure	Land
Mineral/Transf. Oil	42,000	CA	12/08/10	Facility	Equipment Failure	Land
Crude Oil	40,000	CA	04/17/07	Pipeline	Equipment Failure	Land
Oily Water Mixture	37,306	CA	11/11/06	Facility	Equipment Failure	Impermeable Surface
Oily Water Mixture	36,750	CA	06/24/09	Facility	Equipment Failure	Land
Oily Water Mixture	33,600	CA	04/14/06	Pipeline	Equipment Failure	Impermeable Surface
Kerosene/Jet Fuel	33,600	CA	02/15/10	Vessel	Org/Mgmt Failure	Marine
Oily Water Mixture	31,500	CA	12/03/09	Facility	Equipment Failure	Land
Oily Water Mixture	31,500	CA	06/10/08	Facility	External Conditions	Land
Oily Water Mixture	30,240	CA	04/20/07	Facility	Equipment Failure	Land
Diesel Oil	30,000	OR	05/09/02	Other	External Conditions	Fresh Water
Gasoline	29,400	CA	08/14/05	Pipeline	Human Error	Land
Crude Oil	29,400	CA	10/01/06	Facility	Equipment Failure	Impermeable Surface
Gasoline	27,500	CA	04/25/07	Vehicle	Equipment Failure	Land
Crude Oil	26,460	CA	01/30/06	Pipeline	Human Error	Land
Crude Oil	26,250	CA	06/11/08	Facility	Equipment Failure	Land
Oily Water Mixture	26,250	CA	06/17/09	Facility	Equipment Failure	Land
Crude Oil	25,200	CA	11/27/05	Pipeline	Equipment Failure	Land
Gasoline	24,500	HI	10/06/04	Unknown	Equipment Failure	Land
Diesel Oil	24,500	WA	10/27/10	Facility	Equipment Failure	Land
Kerosene/Jet Fuel	24,000	WA	03/01/05	Pipeline	Equipment Failure	Land
Kerosene/Jet Fuel	22,388	CA	05/18/11	Unknown	Unknown	Marine
Oily Water Mixture	21,546	CA	06/27/08	Facility	Equipment Failure	Land
Crude Oil	21,336	CA	06/01/10	Pipeline	Equipment Failure	Land
Diesel Oil	21,000	CA	05/18/06	Pipeline	Equipment Failure	Land
Oily Water Mixture	21,000	CA	07/11/08	Facility	Equipment Failure	Land
Crude Oil	21,000	CA	11/06/06	Facility	Unknown	Land
Unknown	21,000	OR	01/13/11	Vehicle	Equipment Failure	Land
Oily Water Mixture	21,000	CA	03/29/07	Pipeline	Human Error	Land
Other	21,000	CA	06/04/03	Facility	Equipment Failure	Marine
Crude Oil	20,622	CA	09/06/08	Facility	Equipment Failure	Land
Diesel Oil	20,000	CA	05/02/05	Pipeline	Equipment Failure	Land
Diesel Oil	20,000	CA	12/08/09	Facility	Human Error	Land
Gasoline	18,900	HI	02/13/08	Facility	Human Error	Land
Crude Oil	18,900	CA	05/15/06	Facility	Human Error	Land
Diesel Oil	18,200	WA	11/03/06	Facility	Equipment Failure	Land
Bunker C/IFO/HFO	17,000	CA	09/14/11	Private	Equipment Failure	Marine
Gasoline	16,800	CA	03/24/06	Vehicle	Unknown	Land
Crude Oil	16,800	CA	10/13/06	Pipeline	Equipment Failure	Land

Continued on next page



# 2011-2012 IN REVIEW:

## OIL SPILL TASK FORCE ACTIVITIES AND ACCOMPLISHMENTS

### SPILLS GREATER THAN 10,000 GALLONS (2002-2011) Continued from page 27

PRODUCT	VOL.	STATE	DATE	SOURCE	CAUSE	MEDIUM
Crude Oil	16,800	CA	06/02/06	Facility	Equipment Failure	Impermeable Surface
Crude Oil	16,800	CA	12/03/09	Facility	Equipment Failure	Land
Bunker C/IFO/HFO	16,800	CA	08/07/07	Facility	Equipment Failure	Land
Waste Oil	15,750	WA	06/12/06	Facility	Equipment Failure	Land
Diesel Oil	15,000	OR	10/31/05	Facility	Human Error	Fresh Water
Diesel Oil	15,000	WA	08/01/08	Facility	Equipment Failure	Impermeable Surface
Other	14,700	CA	12/04/04	Pipeline	Equipment Failure	Fresh Water
Diesel Oil	14,680	AK	12/08/04	Vessel	Human Error	Marine
Oily Water Mixture	14,070	CA	07/29/07	Facility	Human Error	Land
Diesel Oil	14,000	HI	11/01/11	Vessel	Equipment Failure	Land
Oily Water Mixture	14,000	CA	09/16/06	Pipeline	Equipment Failure	Land
Crude Oil	14,000	CA	03/07/03	Pipeline	Equipment Failure	Land
Oily Water Mixture	13,659	CA	01/10/07	Facility	Equipment Failure	Land
Kerosene / Jet Fuel	13,630	AK	10/30/08	Facility	Equipment Failure	Land
Bunker C/IFO/HFO	13,524	WA	04/07/05	Facility	Human Error	Land
Crude Oil	13,500	AK	11/29/09	Facility	Equipment Failure	Land
Oily Water Mixture	13,440	CA	01/21/07	Facility	External Conditions	Land
Mineral/Transf. Oil	13,000	HI	03/22/07	Vessel	Equipment Failure	Marine
Diesel Oil	13,000	HI	07/20/06	Vessel	Equipment Failure	Marine
Asphalt / Creosote	13,000	OR	08/11/04	Vehicle	Equipment Failure	Land
Crude Oil	12,852	CA	06/28/10	Facility	Equipment Failure	Fresh Water
Oily Water Mixture	12,684	CA	04/03/08	Facility	Equipment Failure	Land
Oily Water Mixture	12,600	CA	10/12/07	Pipeline	Equipment Failure	Land
Oily Water Mixture	12,600	CA	12/03/09	Facility	Equipment Failure	Land
Asphalt / Creosote	12,600	CA	11/13/09	Facility	Human Error	Land
Crude Oil	12,600	CA	07/15/07	Facility	Equipment Failure	Land
Crude Oil	12,600	CA	11/26/07	Facility	Equipment Failure	Land
Oily Water Mixture	12,600	AK	01/29/07	Facility	Equipment Failure	Land
Diesel Oil	12,248	AK	04/24/05	Facility	Human Error	Land
Other/Unknown	12,118	AK	12/18/02	Facility	Other	Land
Mineral/Transf. Oil	12,096	CA	09/30/07	Pipeline	Equipment Failure	Land
Crude Oil	12,000	CA	03/15/07	Facility	Equipment Failure	Land
Oily Water Mixture	11,970	CA	05/01/07	Pipeline	Equipment Failure	Land
Crude Oil	11,676	CA	03/04/06	Facility	Equipment Failure	Land
Other/Unknown	11,611	AK	02/26/02	Facility	Other	Land
Diesel Oil	11,000	AK	11/17/03	Facility	Human Error	Land
Gasoline	11,000	OR	12/02/02	Vehicle	Human Error	Fresh Water
Gasoline	11,000	WA	11/27/03	Vehicle	Unknown	Fresh Water
Gasoline	11,000	WA	03/23/09	Vehicle	Human Error	Land
Diesel Oil	10,584	HI	08/05/05	Pipeline	Equipment Failure	Land
Other	10,500	WA	09/13/07	Facility	Human Error	Land
Oily Water Mixture	10,500	CA	08/12/06	Pipeline	Equipment Failure	Land
Oily Water Mixture	10,500	CA	04/11/08	Facility	Human Error	Land
Oily Water Mixture	10,500	CA	05/29/06	Pipeline	Equipment Failure	Fresh Water
Crude Oil	10,080	CA	07/21/08	Pipeline	Equipment Failure	Land



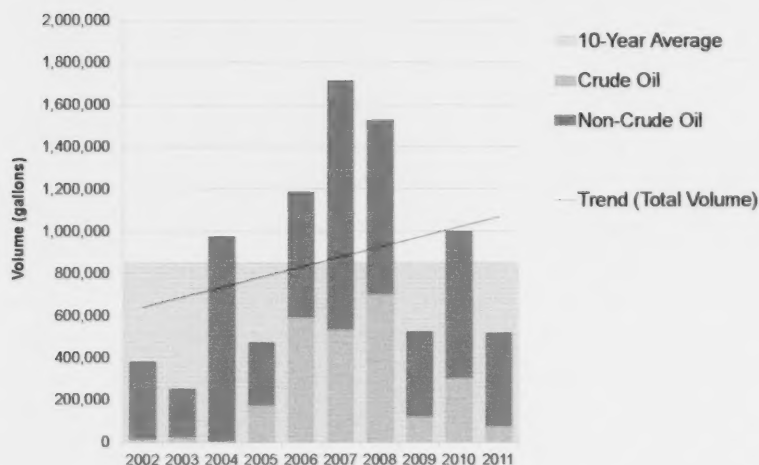


## SUMMARY OF SPILLS (2002 - 2011)

### CRUDE VS. NON-CRUDE SPILLS BY YEAR (2002 - 2011)

YR	NON-CRUDE		CRUDE		TOTAL	
	COUNT	GALS	COUNT	GALS	COUNT	GALS
2002	516	367,909	23	12,769	539	380,678
2003	533	225,721	16	28,015	549	253,736
2004	573	973,545	7	2,092	580	975,637
2005	580	299,516	19	172,871	599	472,387
2006	1,155	594,280	242	589,867	1,397	1,184,147
2007	1,202	1,179,964	209	530,918	1,411	1,710,882
2008	1,154	823,197	225	700,297	1,379	1,523,494
2009	942	401,591	134	120,972	1,076	522,563
2010	946	696,557	129	303,808	1,075	1,000,365
2011	947	441,790	128	73,004	1,075	514,794
<b>10 YEAR CUMULATIVES</b>						
Total	8,548	6,004,070	1,132	2,534,613	9,680	8,538,683
Avg	855	600,407	113	253,461	968	853,868

### CRUDE VS. NON-CRUDE SPILLS (2002 - 2011)



### SUMMARY BY PRODUCT:

- Over the 10-year period, the combined volume of Non-Crude spills was more than twice that for Crude Oil spills.

#### Crude Oil Spills

- The top two Crude Oil spills during the 10-year period were 463,848 gallons in California (2008) and a 267,000 gallon spill in Alaska (2006). The combined volume of these two incidents comprised 29% of the total Crude Oil volume released for the period.

#### Non-Crude Oil Spills

- Diesel Oil comprised 26% of the total spill volume and 37% of the Non-Crude spill volume for the period.
- Bunker C/IFO/HFO spills represented 9% of the total volume (Crude and Non-Crude combined) with 79 spills, about 1% of the number of spills for the 10-year period.



2011-2012 IN REVIEW:  
OIL SPILL TASK FORCE ACTIVITIES AND ACCOMPLISHMENTS

**SUMMARY**  
**2002 - 2011**

**SUMMARY BY SOURCE:**

- Overall, Facilities (49%) and Pipelines (23%) were the major sources of spills during the 10-year period. They were also the major sources of Crude Oil spills. Facilities were the major source of Non-Crude Oil spills.

**Non-Crude Oil Spill Sources**

Source	Gallons
Facility	3,183,965
Vehicle	1,173,308
Vessel	833,353
Pipeline	537,801
Other/Unknown	275,643
<b>Total</b>	<b>6,004,070</b>

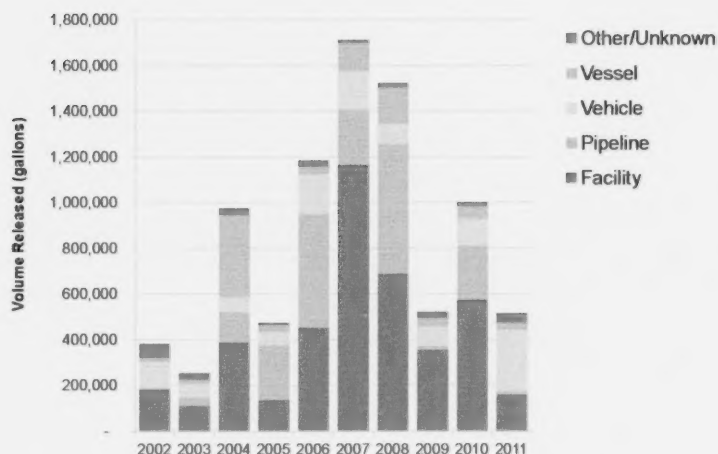
- Facilities were the source of 53% of the Non-Crude spill volume.

**Crude Oil Spill Sources**

Source	Gallons
Pipeline	1,453,823
Facility	1,038,164
Vehicle	31,337
Other/Unknown	5,955
Vessel	5,334
<b>Total</b>	<b>2,534,613</b>

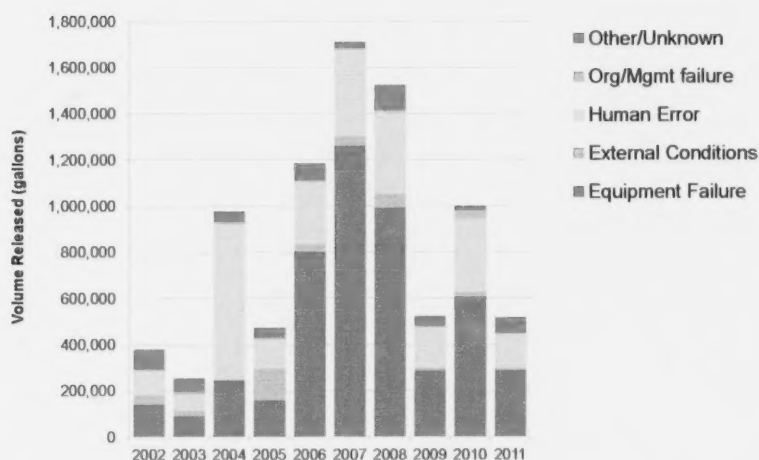
- Pipelines (57%) and Facilities (41%) were the source of 98% of the Crude Oil spill volume.

**ANNUAL SPILL VOLUME BY SOURCE (2002 - 2011)**





## ANNUAL SPILL VOLUME BY CAUSE (2002 - 2011)



## SUMMARY

2002 - 2011

### SUMMARY BY CAUSE:

- Overall, Equipment Failure (57%) and Human Error (31%) were the major spill causes.

### Non-Crude Oil Spill Sources

Source	Gallons
Equipment Failure	2,782,889
Human Error	2,430,919
Other/Unknown	498,382
External Conditions	222,911
Org./Mgt. Failure	68,969
<b>Total</b>	<b>6,004,070</b>

- Equipment Failure (46%) and Human Error (40%) were the predominant causes for Non-Crude spills.

### Crude Oil Spill Sources

Source	Gallons
Equipment Failure	2,097,682
Human Error	198,170
External Conditions	156,100
Other/Unknown	76,760
Org./Mgt. Failure	5,901
<b>Total</b>	<b>2,534,613</b>

- 83% of the total Crude Oil spill volume was due to Equipment Failure





## 2011-2012 IN REVIEW:

### OIL SPILL TASK FORCE ACTIVITIES AND ACCOMPLISHMENTS

#### **IMPLEMENTING RECOMMENDATIONS FROM OUR FIVE-YEAR REVIEW OF THE STATUS OF THE WEST COAST OFFSHORE VESSEL TRAFFIC RISK MANAGEMENT PROJECT RECOMMENDATIONS**

The West Coast Offshore Vessel Traffic Risk Management (WCOVTRM) Project was co-sponsored by the Pacific States/British Columbia Oil Spill Task Force and the U.S. Coast Guard Pacific Area from 1999 to 2002. Rick Holly of the California Office of Spill Prevention and Response served as the Task Force co-chair. USCG Pacific Area co-chairs included CAPT Ed Page, CAPT Frank Whipple, CAPT Glenn Anderson and CDR Stephen Danscuk. The goal of the project was to reduce the risk of collisions or drift groundings caused by vessel traffic transiting 3 to 200 nautical miles off the West Coast between Cook Inlet in the North and San Diego in the South. Vessels of concern included tank, cargo/passenger and fishing vessels of 300 gross tons or larger, as well as tank barges.

The WCOVTRM stakeholder workgroup collected and reviewed data on typical coastwise traffic patterns, traffic volume, existing management measures, weather data and ship drift patterns, historic casualty rates by vessel type, the availability of assist vessels, the environmental sensitivity of the coastlines, socio-economic consequences of a spill and projections of relevant future initiatives. Using the drift and tug availability data, they modeled likely tug response times under both average and severe weather conditions. The Workgroup then developed a Relative Ranking/Risk Indexing Worksheet that evaluated nine factors: volume of oil/vessel design; drift rates; areas of higher collision hazards; distance offshore; weather/season; tug availability; coastal route density; historic casualty rates by vessel type; and coastline sensitivity. Using this tool, they developed and ranked a total of fifty-two casualty scenarios in all the West Coast jurisdictions. These were then extrapolated into 1,296 additional scenarios on the West Coast, a modeling process which defined both average and "higher risk" areas from Alaska to California.

Workgroup members then addressed four risk factors considered most amenable to change: tug availability, collision hazards, historic casualty rates by vessel type and distance offshore. They adopted final Findings and Recommendations focused on these four factors in April of 2002. The WCOVTRM report is available at: [http://www.oilspilltaskforce.org/wcovtrm\\_report.htm](http://www.oilspilltaskforce.org/wcovtrm_report.htm)

The last recommendation in the 2002 WCOVTRM Project report was to conduct a five-year review on the implementation status and effectiveness of the 2002 Recommendations. Accordingly, in 2007 the Pacific States/British Columbia Oil Spill Task Force worked with Rick Holly of the Office of Spill Prevention and Response (OSPR) of the California Department of Fish and Game, who had served as the initial Project Co-Chair and Mr. Steve Danscuk of the USCG Pacific Area, plus the stakeholders involved in the original project, to conduct a review. After a series of conference calls and an iterative review/comment process, the Workgroup adopted "Recommendations for Further Action" in 2008. Those recommendations covered the following categories:

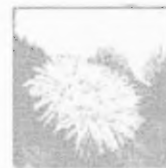
- Recommendations to improve navigation safety and avoid vessel casualties;
- Recommendations regarding rescue tug availability;
- Steps to track observance of recommended vessel transit distances offshore;
- Recommendations regarding data improvements; and
- Recommendations regarding further implementation reviews.

The final 5-Year Review report and recommendations are posted on the Task Force at: [http://www.oilspilltaskforce.org/docs/wcovtrm\\_5\\_year\\_status\\_review\\_report\\_04\\_09.pdf](http://www.oilspilltaskforce.org/docs/wcovtrm_5_year_status_review_report_04_09.pdf)

Pursuant to these recommendations, we have advocated that Harbor Safety Committees work with their U.S. Coast Guard Sector Commanders to ensure 24/7 access to tug company dispatchers for vessel rescue purposes. We are also tracking adoption of the Dutch Harbor model emergency towing packages; a towing package for vessels <50,000 GT has been purchased by U.S. Coast Guard District 13 for the entrance to the Columbia River.

The U.S. Coast Guard Pacific Area recently monitored vessels transiting coastwise off the West Coast via AIS in order to determine whether they are observing the voluntary offshore transit distances recommended in our 2002 report (50 nautical miles (NM) for laden tank ships and 25 NM for nontank vessels and laden tank barges). They conducted four reviews, as outlined below:

- The first review period was from October 31-Nov 6, 2010. During that time, the total number of



vessels transiting the West Coast as identified by AIS was 406. Of those, 95% were observing the recommended offshore distances. For those non-tank vessels running inside 25 nm, the average distance offshore was 18.5 NM. The average distance offshore for non-observant tank vessels was 39.5 NM.

- The second review period was February 7-14 of 2011. During that time, the total number of vessels transiting the west coast was 401 (359 nontank vessels and 42 tankers). During this period, the percentage observing the recommended distances increased to 96%, although the distances from shore for those vessels that were non-observant decreased to 17.8 NM for nontank vessels and 33.8 NM for tankers.
- The third review was conducted May 2-9, 2011. The total number of vessels transiting the west coast during that period was 456. The percentage observing the recommended distances increased to 97%. The average distance offshore for non-tank vessels not observing the recommended distances was 15 NM. The average distance for tank vessels not observing the recommended distances was 36 NM.
- The fourth and final review was conducted from August 1 to August 8, 2011. The total number of vessels transiting coastwise during that period was 576. The percentage of vessels complying with recommended distances was 96%. The average distance offshore for non-compliant non-tank vessels was 18 NM and the average distance for non-compliant tank vessels was 30 NM.

These high rates of "compliance" with the recommended distances offshore are very encouraging and the Pacific States/British Columbia Oil Spill Task Force greatly appreciates the analysis done by the U.S. Coast Guard Pacific Area.

#### **SUPPORTING HARBOR SAFETY COMMITTEES**

Also pursuant to these 2008 WCOVTRM recommendations, we met with the California Harbor Safety Committees (HSCs) in November 2009 and briefed them on the WCOVTRM recommendations that applied to HSCs. They were enthusiastic about our offer to establish a webpage with links to their Harbor Safety Plans, so this was done. The Harbor Safety Committees for Puget Sound and the Columbia River were also advised of the WCOVTRM recommendations and their weblinks

were added to the webpage, as was a link for the Hawaii Ocean Safety Team (HOST) in 2010. The Harbor Safety Committee webpage also includes information on Best Maritime Practices (BMPs).

On October 25-26, 2011 the Task Force and the Office of Spill Prevention and Response (OSPR) of the California Department of Fish and Game co-hosted a two-day "summit" for the Harbor Safety Committee Chairs and staff from California, Hawaii, Oregon and Washington. Our intent was to give them an opportunity to share their Best Maritime Practices and cooperate on issues of regional concern. The chairs and some vice chairs of the following Harbor Safety Committees attended: San Diego, Los Angeles/Long Beach, Port Hueneme, the San Francisco Bay Region, Humboldt Bay, the Lower Columbia River Region, Puget Sound and the Hawaii Ocean Safety Team. Other attendees included representatives of OSPR, NOAA, the U.S. Coast Guard and the California Air Resources Board.

The Harbor Safety Committee chairs were enthusiastic for a regional venue and asked the Task Force to set up and support a listserve for them. They also agreed to meet again in the fall of 2012, most likely in California in conjunction with the Prevention First conference. They acknowledged that working together and sharing information promotes consistency, which the maritime industry appreciates. Some of the major topics being addressed by the Harbor Safety Committees in our region include:

- Loss of Power issues;
- Disaster/Tsunami planning;
- Updates to the Tank Vessel Escort regulations;
- Recreational Boater outreach;
- Large Event Planning (e.g., the America's Cup);
- Heavy Weather BMPs ;
- Bunkering Standards of Care;
- Japanese tsunami debris; and
- Ocean spatial planning.

Summary notes of the Summit are available at: <http://www.oilspilltaskforce.org/harborsafety.htm>.



## 2011-2012 IN REVIEW:

### OIL SPILL TASK FORCE ACTIVITIES AND ACCOMPLISHMENTS

#### **PROMOTING BEST INDUSTRY SPILL PREVENTION PRACTICES FOR VESSELS**

Following the *Locke vs. Intertanko* U.S. Supreme Court decision in March 2000, the 13th Coast Guard District and the Washington Department of Ecology set out to identify gaps between the existing international and federal regulatory regimes for tank vessels and the Washington State standards that were pre-empted by the Supreme Court decision. Once the gaps were identified, they were ranked by Coast Guard marine safety professionals and the licensed mariners at Ecology to determine which practices were most important for reducing the risk of an oil spill. The industry practices for tankers and tank barges were identified and ranked separately and consensus was reached on the relative ranking.

In 2003, the Task Force took this analysis to the next level by enlisting the input of industry leaders in the ranking process. Based on the strong recommendation of the very experienced and respected tanker operators who contributed to the ranking process, the voluntary industry practices for self-propelled tank vessels were expanded to all large commercial vessels. To access our report on this project and the industry rankings, please go to the following site: [http://www.oilspilltaskforce.org/docs/project\\_reports/VesselBipReport.pdf](http://www.oilspilltaskforce.org/docs/project_reports/VesselBipReport.pdf).

Since 2003, the Task Force has communicated these Best Industry Practices to the shipping and towing industry. We recently received specific replies from the American Waterways Operators regarding the recommended Best Industry Practices for Tug and Tank Barge Operators; they indicate that the recommended practices are now covered by either AWO's Responsible Carrier Program, member companies' own management practices, or regulations.

#### **DEVELOPING A REGIONAL "BEST BUNKERING PRACTICES" VIDEO**

The Task Force initiated a new project in 2012 with the goal of developing a regional video on "best bunkering practices." The Washington Department of Ecology had worked with Maritime Training Services to produce the original bunkering video in 2002. Since the information in that video is specific to Washington waters, the Task Force has chartered a workgroup of representatives from member agencies to work with the U.S. Coast Guard and Transport Canada to update the video and make it applicable throughout our regional area.

Ted Mar, Chief of the Marine Safety Branch for the California Office of Spill Prevention and Response, chairs the Bunkering Video Workgroup. Other members include Gary Folley of the Alaska Department of Environmental Conservation; Chip Boothe and Nhi Irwin from the Washington Department of Ecology; Scott Smith of the Oregon Department of Environmental Quality, and Curtis Martin of the Hawaii Department of Health. Stephen Danscuk, Chief of the Inspections and Investigations Branch of the U.S. Coast Guard Pacific Area and CAPT Ion Ionescu and Shishir Rawat from Marine Safety, Transport Canada are monitoring and advising the Workgroup. We are also working closely with the Harbor Safety Committees in our region on this project.

The Bunkering Project Workgroup is convening by conference call and will work with Maritime Training Services on production of the new video. Once the new video is complete, it is our hope to own the copyright in order to make it widely available throughout our member jurisdictions.

#### **SUPPORTING THE PACIFIC OIL SPILL PREVENTION EDUCATION TEAM**

The Pacific Oil Spill Prevention Education Team (POSPET) met in October 2011 and will meet again in March of 2012 to share outreach strategies and plan for collaborative projects. POSPET members represent Washington Sea Grant, Washington's Department of Ecology, the Puget Soundkeeper Alliance, the U.S. Coast Guard and their Marine Safety Auxiliaries in Oregon and Washington, the Washington Department of Natural Resources, the City of Des Moines Marina, the Georgia Strait Alliance, the OceanWatch Boaters Association of British Columbia, the Alaska Department of Environmental Conservation, the Cook Inletkeeper, the British Columbia Ministry of Environment, the Oregon Department of Environmental Quality, the Oregon Marine Board, the Pacific States Marine Fisheries Commission Habitat Education Program, the Pacific Shellfish Institute, the California Coastal Commission and the California Department of Boating and Waterways, the Boat U.S. Foundation, and the California Office of Spill Prevention and Response. POSPET is chaired by Eric Olsson of Washington Sea Grant.

POSPET encourages networking in order to exchange ideas and promote innovative approaches to outreach and education. Through informal



collaboration and access to beneficial member review and feedback, POSPET adds value and has improved the quality and reach of individual outreach efforts. POSPET maintains a listserve to facilitate this information exchange between its Fall and Spring meetings.

POSPET member organizations and agencies have collaborated to design, produce, and distribute placards, decals, brochures, and fuel pump tags with the Spills Aren't Slick messages. The Washington Department of Ecology and the Oil Spill Task Force combined funds to purchase materials in 2011.

In addition to this campaign, POSPET also promotes the innovative 1-800-OILS-911 spill reporting number in British Columbia, Washington, Oregon, and California. Using this easy-to-remember number, a boater reporting an oil spill is automatically routed to the correct emergency response call center in any of those jurisdictions. The Pacific States/BC Oil Spill Task Force provides staff support for POSPET and maintains a listserve as well as this spill reporting number.

Summary notes from POSPET meetings, photos, a featured POSPET member, a list of all POSPET members with links to their websites, as well as PDFs of the Spills Aren't Slick poster, brochure, pump tag, and decals are posted on the POSPET page at: <http://www.oilspilltaskforce.org/pospet.htm>.



*The Oregon State Marine Board's Clean Boater Kit*

#### **MONITORING SPILL PREVENTION TOPICS OF CONCERN**

Each year the Coordinating Committee monitors and shares information on selected spill prevention topics. Our spill prevention topics for 2011-2012 included:

- Oil spill risks from sunken and derelict vessels
- Waste oil dumping by deep draft commercial ships
- Vessel and Facility Oil Transfer regulations
- Pipeline spills and ADEC's pipeline leak detection efforts
- Spills from trucks and railroads
- Salvage capabilities and regulations (refers to emergency stabilization, firefighting, and lightering)
- Tug escort requirements
- Towing vessel inspection regulations\*
- Federal preemption issues
- Vessel traffic trends and risk assessments or studies
- Cruise ship operations with regard to spills and other water pollution impacts
- NPDES for vessel wastewater discharges
- Liquefied Natural Gas shipping and terminal operations
- Green Ports
- Ballast water regulations preventing spread of invasive aquatic species
- Spill Prevention Lessons Learned

\* The Pacific States/BC Oil Spill Task Force submitted comments in December of 2011 on the U.S. Coast Guard's Proposed Rulemaking regarding "Inspections of Towing Vessels." We supported the Coast Guard's proposed towing safety management systems and offered recommendations to make them more robust. We also made recommendations regarding reporting navigational safety equipment failures, requiring that a duly qualified licensed officer continuously be in charge of navigation of the vessel, requiring a second person as part of the bridge watch for all vessels towing tank barges carrying oil or hazardous materials in bulk, requiring emergency reconnection equipment, implementing a three-watch system, and more. You can read our comments at: [http://www.oilspilltaskforce.org/docs/comments/NPRM\\_INSP\\_ECTION\\_OF\\_TOWING\\_VESSELS.pdf](http://www.oilspilltaskforce.org/docs/comments/NPRM_INSP_ECTION_OF_TOWING_VESSELS.pdf)





## SPILL PREPAREDNESS AND RESPONSE PROJECTS

### *IMPROVING U.S./CANADIAN TRANSBOUNDARY SPILL PLANNING AND RESPONSE CAPABILITIES*

The Task Force launched a multi-year initiative in 2008 to review U.S. and Canadian Transboundary Spill Planning and Response Issues, with the goal to: Review and document existing U.S./Canadian Transboundary oil spill response plans and capabilities for the British Columbia/Alaska and British Columbia/Washington borders, acknowledging existing authorities and response management systems. Recommend improvements as needed for both joint response and planning efforts, as well as for planning and capacity building within each jurisdiction. The Project focused on the marine borders between Alaska and British Columbia (CANUSDIX), and between British Columbia and Washington (CANUSPAC).

The first meeting of the U.S./Canadian Transboundary Spill Planning and Response Project Workgroup was hosted by the Washington Department of Ecology in Lacey, WA in June of 2008. Workgroup members were briefed on key topics and developed a work plan that included a list of topics to be covered in their project report as well as a Project Timeline. Dave Byers, Response Section manager at the Washington Department of Ecology chaired this Project Workgroup. Summary notes from this meeting are available at [http://www.oilspilltaskforce.org/docs/June\\_2008\\_Workgroup\\_meeting\\_notes.pdf](http://www.oilspilltaskforce.org/docs/June_2008_Workgroup_meeting_notes.pdf). The Project Work Plan is at: [http://www.oilspilltaskforce.org/docs/Transboundary\\_Project\\_Workplan.pdf](http://www.oilspilltaskforce.org/docs/Transboundary_Project_Workplan.pdf).

The Project Workgroup chartered five subcommittees to review assigned topics and develop reports; each was chaired by a Workgroup member: Dave Byers of the Washington Department of Ecology chaired the Command subcommittee; Graham Knox of the British Columbia Ministry of Environment chaired the Planning subcommittee; Kevin Gardner of the Western Canada Response Organization chaired the Operations subcommittee; Bob Mattson of the Alaska Department of Environmental Conservation chaired the Logistics Subcommittee; and David Owings of the Southeast Alaska Petroleum Resource Organization (SEAPRO) chaired the Finance subcommittee.

Twenty-seven stakeholders served on the Project Workgroup. They represented Environment Canada, the U.S. Fish and Wildlife Service (Alaska and Washington), the U.S. Department of the Interior's Office of Environmental Policy and Compliance for the Alaska region, the Olympic Coast National Marine Sanctuary, the Makah Tribe Office of Marine Affairs, the British Columbia Chamber of Shipping, the Washington State Maritime Cooperative (WSMC), the Marine Spill Response Corporation (MSRC) for the Pacific/NW Region, the Western Canada Marine Response Corporation, the Bureau of Indian Affairs for the Alaska Region, the Pacific Region of the American Waterways Operators, O'Brien's Oil Pollution Services, the SE Alaska Petroleum Resource Organization (SEAPRO), the National Response Corporation's Environmental Services, ECM Maritime Services LLC, the Georgia Strait Alliance, U.S. Coast Guard Pacific Area Response Division, BP Crises Management and Emergency Response, the Council of Marine Carriers in British Columbia, the Marine Exchange of Puget Sound, People for Puget Sound, NOAA's Office of Response and Restoration, and the Task Force member agencies in Alaska, British Columbia, and Washington.

In addition to the Project Workgroup members, thirty-six subject matter experts were recruited for the Subcommittees; they represented NOAA's Assessment and Restoration Division, the Western Canada Marine Response Corporation, SEAPRO, the Washington Department of Fish and Wildlife, the Makah Office of Marine Affairs, the 13th U.S. Coast Guard District, the Canadian Wildlife Service, the Canada Border Services Agency Pacific Region, U.S. Customs and Border Protection, attorneys from Vancouver, British Columbia and Seattle, Washington who represent various protection and indemnity (P&I) clubs, and the Task Force member agencies in Alaska, British Columbia, and Washington.

The five subcommittees convened by conference call and worked by email from October 2008 through February 2009 to develop reports on the topics assigned by the Project Workgroup and produce the First Draft of the U.S./Canadian Transboundary Spill Project Report. The Project Workgroup and Subcommittee members, as well as representatives of seventeen tribes in the border areas of Washington and Alaska and five First Nations and Treaty governments in British Columbia,



representatives of EPA Region 10, the Canadian and U.S. Coast Guards, the Seattle Audubon Society and the Pacific Merchant Shipping Association were given opportunities to review and comment on this first draft.

From 2009 through the spring of 2010 the Task Force Executive Coordinator made revisions based on their comments as well as additional edits and revisions recommended by subject experts or based on new information. Each Subcommittee then reviewed and commented on their revised Section, which was subsequently sent to the full Project Workgroup and federal agencies for further review and comment.

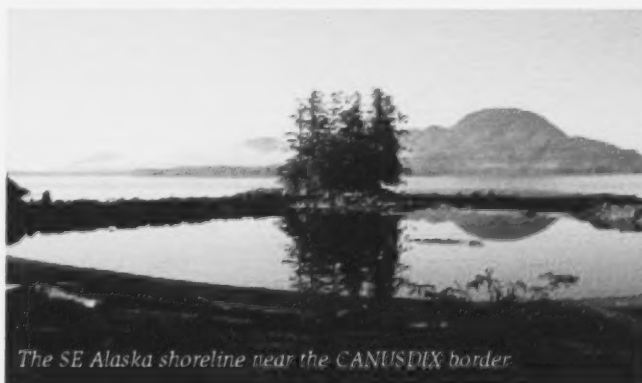
The Project Workgroup convened in a series of conference calls in 2010 to adopt draft recommendations based on the information in these second draft topic papers. A public comment draft was then posted on our website for six weeks from December 2010 through January 2011. Revisions were made based on comments received and the Project Workgroup convened in Vancouver, British Columbia in March of 2011 to review the Final Draft. Their final revisions were incorporated and The Stakeholder Workgroup Review of Planning and Response Capabilities for a Marine Oil Spill on the U.S./Canadian Transboundary Areas of the Pacific Coast Project Report was posted on our website in April of 2011. See: [http://oilspilltaskforce.org/docs/notes\\_reports/Final\\_US\\_Canada\\_Transboundary\\_Project\\_Report.pdf](http://oilspilltaskforce.org/docs/notes_reports/Final_US_Canada_Transboundary_Project_Report.pdf). Copies were shipped to all members of the Project Workgroup and Subcommittees, as well as to agencies and constituencies to which recommendations were directed.

Thirty-six (36) topic papers in the report focus on analysis of Command, Planning, Operations, Logistics, and Finance issues on the CANUSPAC and CANUSDIX transboundary areas. Among the key findings:

- The Deepwater Horizon oil spill highlighted the importance of involving local, tribal and state (provincial in Canada) governments in federal spill planning, preparedness and response. This is especially applicable for the local and tribal governments on both sides of the U.S./Canadian border. It is also particularly crucial that the Province of British Columbia participate in Canadian federal planning and response efforts. Implementation of many of the Recommendations from this Project Report will provide opportunities to broaden the base of stakeholders

involved in improving transboundary planning and response.

- A number of challenges from the 1988 Nestucca transboundary spill event remain to this day, including the need for:
  - international coordination of the Port-of-Refuge decisions in Transboundary areas;
  - Coordination of media relations;
  - Enhanced wildlife rehabilitation and volunteer management capacities (volunteer involvement became a main media focus during the Nestucca response);
  - Transboundary waste disposal plans; and
  - Improved response capacities for remote shorelines;
- Although spill response organizations in both transboundary areas have been working together for years and have robust mutual aid agreements, U.S. response organizations will need Transport Canada's designation as an "Approved response organization" in order to qualify for responder immunity when operating in Canada;
- The CANUSDIX and CANUSPAC Joint Response Teams can learn from each other's initiatives - as well as those of the CANUSLANT JRT - while promoting consistency on both British Columbia borders in the process; and



*The SE Alaska shoreline near the CANUSDIX border*

- Considering their potential liability as well as their potential role as the Responsible Party if a spill occurs, the shipping and oil industries operating in the transboundary areas should demand a stronger role in transboundary response planning and exercises, since industry will be critical to implementation the Recommendations in this Report.



The final Stakeholder Workgroup Review of Planning and Response Capabilities for a Marine Oil Spill on the U.S./Canadian Transboundary Areas of the Pacific Coast Project Report includes a total of 111 recommendations directed at 14 agencies, organizations, or target constituencies. One Workgroup recommendation is for the Pacific States/British Columbia Oil Spill Task Force to lead a review in five years (2016) to determine the implementation status of all their recommendations.

Since April of 2011, the Alaska Department of Environmental Conservation, the British Columbia Ministry of Environment, and the Washington Department of Ecology have been implementing the recommendations to their agencies. They – and the Task Force – have also been coordinating with federal agencies to promote implementation of the recommendations. In January of 2012, the U.S./Canada Transboundary Project was presented to a meeting of the MEXUSPAC Joint Response Team as a model for analysis of transboundary planning and preparedness.

#### INCREASING THE U.S. LIMITS OF LIABILITY

In November 2005, the Pacific States/British Columbia Oil Spill Task Force petitioned the U.S. Coast Guard to adjust the Limits of Liability for tank vessels, tank barges, nontank vessels, and appropriate facilities by the Consumer Price Index (CPI) increase since the Oil Pollution Act (OPA) was passed in 1990. That petition for rulemaking and response are located at <http://www.regulations.gov>. The complete docket number is USCG-2005-23163. Documents on this site include our 11/7/2005 letter of petition and the National Pollution Fund Centers' replies of 12/8/2005 and 12/4/2006.

The Delaware River Protection Act of 2006 amended and increased liability limits under OPA for all vessel types - i.e. all tank vessels, which includes tank barges, as well as other nontank vessels. The increases to limits were approximately 50%, which roughly corresponds to the consumer price index increases since OPA 90 was enacted. Increases to liability limits for single hull tank vessels (approximately 150%) exceeded consumer price index increases.

OPA section 1004(d)(4) states that "The President shall, by regulations issued not less often than every 3 years, adjust the limits of liability specified in subsection (a) to reflect significant increase in the Consumer Price Index (CPI)." The 2006 Act

amended the provision authorizing further increases to limits based on consumer price index increases to begin from the date of enactment of the Act. Authority for future rulemaking to increase vessel limits of liability is limited to consumer price increases.

On January 6, 2010, the U.S. Coast Guard adopted a final rule adjusting Limits of Liability for vessels and deepwater ports. The new Limits of Liability for vessels are as follows:

- For a single-hull tank vessel greater than 3,000 gross tons, the greater of \$3,200 per gross ton or 23,496,000;
- For a tank vessel greater than 3,000 gross tons, other than a single-hull tank vessel, the greater of \$2,000 per gross ton or \$17,088,000;
- For a single-hull tank vessel less than or equal to 3,000 gross tons, the greater of \$3,200 per gross ton or \$6,408,000;
- For a tank vessel less than or equal to 3,000 gross tons, other than a single-hull tank vessel, the greater of \$2,000 per gross ton or \$4,272,000; and
- For any other vessel the greater of \$1,000 per gross ton or \$854,400.

The following statement was in the rule: ...to ensure future consistency in inflation adjustments to the limits of liability for all OPA 90 oil spill source categories, the Coast Guard has coordinated the CPI adjustment methodology with DOT, EPA, and DOI. In addition, the Coast Guard, DOT, EPA, and DOI have agreed to coordinate the CPI inflation adjustments to the limits of liability for facilities (i.e., for MTR onshore facilities regulated by Coast Guard, NMTR onshore facilities regulated by DOT, NTR onshore facilities regulated by EPA, and offshore facilities regulated by DOI), as part of the next cycle of inflation adjustments to the limits of liability. This phased approach will allow adequate time for the additional interagency coordination necessary to ensure consistency in implementing the CPI adjustments to the OPA 90 limits of liability for all onshore and offshore facilities.

The following agencies are responsible for OPA facility limits of liability:

- EPA for non-transportation related onshore facilities;
- DOI (MMS) for offshore facilities and related pipelines, except deepwater ports;
- DOT for onshore pipelines, motor carriers, and





railroads; and

- The USCG for transportation-related onshore facilities and deepwater ports, except onshore pipelines, motor carriers and railroads

In the National Pollution Funds Center's 2010 Report on Oil Pollution Act Liability Limits to Congress (submitted 3/29/11; see <http://www.uscg.mil/npfc/> and click on "Liability Limits Report" on the home page) it is stated on page 11 that "Roughly half of the removal costs in Figure 11 (Total Fund Expenditures) are for facility discharges; liability limits for facilities, as previously discussed, are more than adequate at this time." Although the NPFC may consider them to be adequate, oil spill data collected by the Pacific States/British Columbia Oil Spill Task Force in our U.S. member jurisdictions since 2002 consistently shows facilities as a major source of spills (53% of total non-crude volume and 41% of crude volume 2002-2011). This also applies to pipelines, which were the source for 57% of crude oil spilled by volume over that same nine-year period. We believe that the aging infrastructure in facilities and pipelines represents sufficient risk (equipment failure accounted for 52% of the non-crude volume and 72% of the crude volume in 2011 as well as 57% of the total volume for 2002-2011) to justify increasing their limits of liability by the CPI since 1990.

With that in mind, in February 2012 the Pacific States/BC Oil Spill Task Force submitted "Letters of Petition" to the U.S. EPA, the Pipeline and Hazardous Materials Safety Administration, and the Bureau of Ocean Energy Management in February of 2012. We requested that they initiate rulemaking to adjust the limits of liability for the facilities that they regulate by the Consumer Price Index increase since OPA 90 was enacted. These letters are available on our website.

#### TRACKING ICS GUIDANCE, FORMS AND APPLICATIONS

Another initiative under our Preparedness/Response objective has been the establishment of a standing project workgroup to track changes to Incident Command System (ICS) guidance, forms, and practices for oil spill response. Larry Iwamoto of the Alaska Department of Environmental Conservation chairs this workgroup; other member agency representatives include Mike Zollitsch of Oregon DEQ, Elin Storey of the Washington Department of Ecology, D'Arcy Sego of the British Columbia

Ministry of Environment, Chris Klumpp from California OSPR, and Curtis Martin from the Hawaii Department of Environmental Health. The ICS Workgroup will continue to monitor any proposals to amend ICS protocols following the Deepwater Horizon response.

The Task Force's Coordinating Committee is also sharing information on the Professional Qualification Standards (PQSs) that their agencies are using to train their staff for various ICS positions.

#### MAINTAINING THE 1-800-OILS-911 SPILL REPORTING SYSTEM

The Task Force maintains this toll-free spill reporting number in California, Oregon, Washington and British Columbia. The number automatically reaches the 24-hour emergency reporting center in each of these four jurisdictions as a function of the location from which the call originates. For example, a call made to 1-800-OILS-911 from anywhere in Washington will automatically be routed to Washington's emergency reporting center.

Although it is available for anyone to use, information regarding the number is targeted at recreational boaters and fishermen by members of the Pacific Oil Spill Prevention Education Team (POSPET). Usage analysis for July 2010 through January of 2012 shows that 247 spills were reported using 1-800-OILS-911 during that period.

#### MONITORING MUTUAL AID ISSUES

The Pacific States/British Columbia Oil Spill Task Force maintains two mutual aid agreements. The first agreement was adopted in 1993 and outlines policies and protocols for the member agencies to share their response equipment and trained staff. However, since most response equipment and staff are maintained by private-sector Oil Spill Response Organizations (OSROs) under contract to oil spill contingency plan holders, the Task Force adopted another agreement in 1996 that established policies and protocols for release of that equipment for the purpose of mutual aid. This 1996 Agreement was developed by a stakeholder workgroup and acknowledged the need for our member agencies to allow movement of response equipment "out of state" for mutual aid, even though that equipment was cited in a contingency plan approved by the member agency in that state.

After the Deepwater Horizon Oil Spill of National



## 2011-2012 IN REVIEW:

### OIL SPILL TASK FORCE ACTIVITIES AND ACCOMPLISHMENTS

Significance – when so much response equipment left our region to support the effort in the Gulf of Mexico – the Task Force member agencies agreed to review and update the policies set in that 1996 agreement to address the Lessons Learned from that experience.

That resulted in some changes to overall policies as well as the jurisdiction-specific policies, although the Task Force members remain committed to proactive mutual aid. They acknowledge that this agreement applies to mutual aid on the West Coast, which would be given with the understanding that other member agencies agree to cover the lending jurisdiction as needed. Mutual Aid sent out of region will trigger a case-by-case decision-making process. They also acknowledged the unique isolation of the Pacific region with regard to the time it takes to move large response vessels through the Panama Canal – whether west coast vessels moving out or other vessels moving in for mutual aid. For this reason, the Task Force Members committed to developing a robust response capacity on the West Coast that would not need to rely heavily on mutual aid. In addition, the Task Force Members also committed to work with OSROs and planholders to facilitate mutual aid decisions while ensuring that adequate response capacity exists for the planholder. They acknowledged that there are three parties to any mutual aid decision: the planholder, the OSRO, and the regulating agency.

The final revised Agreement was adopted by the Task Force Members at their August 2011 Annual Meeting and is available at: [http://www.oilspilltaskforce.org/docs/FINAL\\_2011\\_Mutual\\_Aid\\_Agreement.pdf](http://www.oilspilltaskforce.org/docs/FINAL_2011_Mutual_Aid_Agreement.pdf)



Hawaii's "ADDS Pack"

### MONITORING OIL SPILL RESEARCH AND DEVELOPMENT

Judd Muskat of the California Office of Spill Prevention and Response (OSPR) chairs an R&D Workgroup which the Task Force established in 2009. Other members include Ellen Faurot-Daniels and Joy Lavin-Jones of the California Department of Fish and Game, Office of Spill Prevention and Response; Kurt Hansen of the U.S. Coast Guard R&D Center; Dr. Carl Brown from Environment Canada; Dr. Amy Merten of NOAA; USCG CDR Eric Miller of the Interagency Coordinating Committee on Oil Pollution Research; Dr. Buzz Martin, Director of R&D and Scientific Support for the Oil Spill Prevention and Response branch of the Texas General Land Office; Chuck Katz for the Space and Naval Warfare Systems Center Pacific; Dianne Munson and Matt Odum of the Alaska Department of Environmental Conservation; Sonja Larson of the Washington Department of Ecology; and Don Pettit for the Oregon Department of Environmental Quality.

The Workgroup has convened by conference call in December of 2009, 2010, and 2011 to share information on current oil spill R&D projects. Summary notes from their calls, which include links to numerous oil spill R&D project reports, are available at: <http://www.oilspilltaskforce.org/projectreports.htm>.

### MONITORING SPILL PREPAREDNESS/RESPONSE TOPICS OF CONCERN

The Coordinating Committee has monitored and shared information on the following oil spill preparedness/response "topics of concern" throughout the past year:

- Volunteer planning and management
- Oil spill drill programs
- Applied response technologies and regulations
- Oil Spill research and development, including BAT and BAP
- Oil Spill Response Organization (OSRO) certifications, mergers, mutual aid and response capabilities
- Joint Information Center (JIC) planning, training, and guidelines
- Natural Resource Damage Assessment (NRDA) initiatives, issues, and activities, including NRDA assessments and collections



- Coordination of inter-jurisdictional wildlife care
- West Coast sea bird and other vulnerable marine populations threatened by oil spills
- Development of remote sensing capabilities and implementation of 24-hour response operations where it would be safe and effective
- Contingency plan regulations and preparedness/response issues re: nontank vessels
- Track planning for Potential Places of Refuge and applications of POR decision-making guidelines
- Status of the Oil Spill Liability Trust Fund
- Use of the Integrated Vessel Response Plan for Tank Vessels
- Lessons learned from the Deepwater Horizon Spill of National Significance
- Preparedness/Response Lessons Learned

## COMMUNICATIONS PROJECTS AND ACTIVITIES

### THE 2011 ANNUAL MEETING

Our 2011 Annual Meeting was hosted by the Alaska Department of Environmental Conservation in Anchorage on August 24. One hundred and fifteen persons attended and heard from various speakers who addressed the theme "Deepwater Horizon – What Have We Learned."

In addition to activity updates from our member jurisdictions and the Task Force, invited speakers reviewed recommendations from both the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling and from the U.S. Coast

Guard's Incident Specific Preparedness Review (ISPR) Team. We also reviewed follow-up actions taken by state and federal agencies and the oil and response industries. To see videos of the presentations, please go to: <http://www.oilspilltaskforce.org/2011annualmeeting/index.htm>.

### THE 2012 CLEAN PACIFIC CONFERENCE

At the time that this 2012 Annual Report is being compiled, we are busy planning for our next Clean Pacific Conference, which will be May 16-17, 2012 at the Long Beach Convention Center. We hope you picked up your copy of this report there!

### THE LEGACY AWARDS

The following persons will receive our 2012 Legacy Awards at the May 16 General Session of the Clean Pacific Conference in Long Beach, CA:

- Rusty Nall, Executive Vice President, the American Marine Corporation and PENCO
- Eric Olsson, University of Washington Sea Grant Program
- Captain Daniel LeBlanc, U.S. Coast Guard Sector Columbia River (FOSC for the barge *Dave Crockett* response)
- Kathy Fletcher, founder of People for Puget Sound
- The U.S. Coast Guard SS *Montebello* Project Team
- The SE Alaska Petroleum Resource Organization (SEAPRO)

Information regarding their accomplishments will be posted on our website following the presentations.

### ONGOING STAKEHOLDER OUTREACH

Stakeholders monitor Task Force activities through our website and also participate in Task Force sponsored events or project workgroups. We host several public events, including our Annual Meetings that alternate with the Clean Pacific Conferences, as well as topic-specific roundtables.

### The Task Force web site

The Task Force website ([www.oilspilltaskforce.org](http://www.oilspilltaskforce.org)) offers the following features:

- The OVERVIEW provides background on the Task Force as well as bios and photos of current Task Force Members;
- CURRENT INTERESTS is where we post event



2011 Annual Meeting



## 2011-2012 IN REVIEW:

### OIL SPILL TASK FORCE ACTIVITIES AND ACCOMPLISHMENTS

and award announcements, our Events Calendar, and reports from recent Task Force meetings or projects;

- **WHAT WE DO** includes our current Strategic Plan and Annual Work Plan, our Memoranda of Cooperation, as well as Resolutions and Agreements signed by the Task Force Members since 1993;
- The **LEGACY AWARD HONOR ROLL** lists all the Task Force Legacy Award Winners since 1999;
- **NOTES & REPORTS** features our Annual Reports (which contain the spill data reports) as well as Task Force comments on federal rulemaking, noteworthy correspondence, meeting notes, and project reports;
- **CONTACT INFORMATION** provides contact details for the Task Force's Coordinating Committee and Executive Coordinator;
- **LINKS** provides links to the Task Force member agencies, other state and provincial agencies on the West, Gulf, and East Coasts, plus key U.S. and Canadian federal agencies;
- The **SPILLS AREN'T SLICK** page provides information on POSPET and its activities; and
- A new page covers West Coast **HARBOR SAFETY COMMITTEES AND BEST MARITIME PRACTICES**.

Our website has received 2,535,063 hits" since it was initiated in 2003; here is a breakdown by year:

#### WEB "HITS" DATA

Year	Total "Hits"
2003 <sup>(1)</sup>	22,269
2004	246,597
2005	471,158
2006	521,506
2007	380,495
2008	262,430
2009	249,892
2010	215,339
2011 <sup>(2)</sup>	134,689
2012 (through February)	30,688

#### NOTES:

(1) The website was initiated in the 3rd quarter of 2003

(2) Some 2nd quarter data was lost when we changed web hosts

#### MAINTAINING OUR PARTNERSHIP WITH THE U.S. COAST GUARD PACIFIC AREA

The Pacific Area Coast Guard and its member Districts have a track record of collaboration with the Oil Spill Task Force on projects of regional interest. Such projects include the Integrated Vessel Response Guidelines (1997), the Oil Spill Field Operations Guide Update (2000), the Best Industry Practices for Vessels and Tank Barges (2003), the West Coast Offshore Vessel Traffic Risk Management Project (2002) and its Five-year Review (2007), Places of Refuge Guidelines (2005), the Clean Pacific Conference (2007), and the Pacific Oil Spill Prevention Education Team (ongoing).

In May of 2008 Vice Admiral Charles D. Wurster, Commander, Coast Guard Pacific Area, and Jean Cameron, Executive Coordinator of the Pacific States/British Columbia Oil Spill Task Force, signed a Memorandum of Understanding that recognizes this 15-year cooperative partnership. It also acknowledges the shared goals of both the U.S. Coast Guard and the Oil Spill Task Force in preparing for and preventing spills, in seeking cooperative methods to foster greater environmental awareness and compliance, and by ensuring that appropriate cleanups are conducted.

The Task Force Coordinating Committee met with representatives of U.S. Coast Guard Pacific Area and Districts 11, 13, 14, and 17 on January 21, 2009 to form a Steering Committee to implement this MOU.

The second of these annual Steering Committee meetings was held in Bellevue, WA on April 14, 2010 and the 2011 meeting took place on May 27, following the International Oil Spill Conference in Portland, Oregon. Representatives from EPA Regions 9 and 10 were also invited to join the meetings in 2010 and 2011 to provide updates on their activities. Summary notes from these meetings are available on our website.

#### ONGOING OUTREACH TO OTHER COASTAL STATES AND PROVINCES

We currently interface with Points of Contact in the oil spill agencies of Texas, Louisiana, Mississippi, Alabama, Florida, Maine, New Brunswick, New Jersey, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, Virginia, the Northwest Territories, Nunavut, the Yukon, and South Carolina as follows:

- They receive the our news clippings and





informational emails;

- They are invited to join the information sharing at the Coordinating Committee meetings in person or by speaker phone;
- We advise them of federal rulemakings of interest and share the Task Force's comments;
- Their agency links are added to our web site;
- They can contact our Coordinating Committee members anytime on any topic - and vice versa; and
- As Points of Contact (POCs) for this information sharing, they are also our POCs for mutual aid requests.

#### OTHER TASK FORCE COMMUNICATIONS AND OUTREACH ACTIVITIES

- Pursuant to our focus on submitting Task Force consensus comments on federal initiatives, the Executive Coordinator tracks rulemaking activities and notifies member agencies of opportunities for comment on relevant proposals. In December of 2011 the Task Force submitted comments on the U.S. Coast Guard's Proposed Rulemaking regarding "Inspections of Towing Vessels." For more information, please see page 35 above.
- The Coordinating Committee of the Task Force held its summer 2011 meeting in Alaska following the Annual Meeting. They held their

fall 2011 meeting in Long Beach in conjunction with the Clean Pacific Conference Program Committee meeting. Their winter 2012 meeting was conducted by conference calls. These meetings provide opportunities for information exchange as well as decisions on administration issues and implementation of projects outlined in our Annual Work Plan. Summary notes for the Coordinating Committee meetings are posted on our website.

- In addition to travel associated with the activities and projects described above, the Executive Coordinator represented the Task Force at the following events during this past work-year:
  - API's Spills Advisory Group meeting in Washington, DC on September 21, 2011;
  - The West Coast JAT meetings on October 11, 2011 and February 29, 2012;
  - SEAPRO's Annual Meeting in Ketchikan, Alaska on October 20, 2011; and
  - The California Statewide Area Committee in San Diego on January 18, 2012.
- The Task Force Executive Coordinator also responds to information requests. Requests this past year covered such topics as the Task Force's governance structure, vessel of opportunity programs, and data on coastwise vessel traffic.
- With regard to "internal communications" among member agencies, the Executive Coordinator provides a summary of news clippings on events and issues of interest to the Task Force. She also maintains a Contact List of Task Force and Coordinating Committee members and produces a Mid-Term Report to the Task Force Members. In addition, all member agencies regularly exchange information on their initiatives and activities.
- The Executive Coordinator and Coordinating Committee are drafting language to extend our 2009-2012 Strategic Plan to 2013 in order to allow the new Executive Coordinator to engage in the next round of Strategic Planning with the Task Force Members.

Owl Cliffs, Rudyard Bay, Misty Fjords National Monument, SE Alaska





2011-2012 IN REVIEW:

## TASK FORCE MEMBER AGENCY ACTIVITIES AND ACCOMPLISHMENTS

*In addition to their dedication of staff and resources to Oil Spill Task Force projects, our member agencies have been involved in a wide range of initiatives in their own jurisdictions, as outlined below:*



ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
(ADEC), DIVISION OF SPILL PREVENTION AND RESPONSE

### PROGRAM MISSION

The Alaska Department of Environmental Conservation's (ADEC) Division of Spill Prevention and Response (SPAR) prevents spills of oil and hazardous substances, prepares for when a spill occurs and responds rapidly to protect human health and the environment. Alaskans have made significant progress in the safe handling, storage, and transportation of oil and chemicals and the cleanup of historical contamination. While we will never totally eliminate the risk of spills, we are constantly learning how to better manage that risk.

In the past 20 years, there has been a significant and continuing advancement in Alaska's spill prevention and response capability. The State established new regulations and substantially upgraded the requirements and review process for contingency plans, added a non-tank vessel contingency plan program and established response depots throughout Alaska, including in some of the most remote regions of the state. In partnership with federal agencies, ADEC has staged emergency towing packages in the Aleutian Islands, Kodiak, Southcentral and Southeast Alaska, has developed Geographic Response Strategies (GRS) for sensitive areas of the state's coastline, and has identified Potential Places of Refuge (PPOR) around the state. Work continues on GRS, PPOR and other projects, including an Aleutian Island Risk Assessment, a Cook Inlet Risk Assessment, a Clean Harbors Program, and updates of the Unified and subarea contingency plans.

In the near future, the State may face significant challenges resulting from an increase in vessel traffic and potential offshore development in the Arctic areas of Alaska. New exploration and drilling technologies may permit close-in offshore as well as onshore oil development in areas that are not currently accessible. Increases in oil and gas exploration will obviously add to the State's workload in both response and prevention. ADEC is

already working on new preparedness initiatives to help meet these challenges

### SPILL RESPONSE

ADEC received reports of 1,364 oil spills, 51 brine spills and 333 hazardous substance spills in 2011. ADEC conducted 219 field responses to oil spills, five field responses to brine spills and 38 field responses to hazardous substance spills. ADEC estimates that 93,165 gallons of oil, 19,877 gallons of brine and 26,879 gallons of hazardous substances were spilled in 2011. Of the 182 oil spills exceeding the Task Force data threshold of one barrel to land or water, 115 were from facilities, 33 were from private property, 21 from vessels, 10 from vehicles and three were from unknown sources.

In 2011 ADEC responded to 25 significant or potentially significant discharges of oil and hazardous substance statewide. The releases involved vessel groundings, vessels adrift, tank farm spills, overfills and oilfield pipeline leaks. ADEC responders actively worked 1,748 spill cleanups throughout the state and closed 1,522 spill cases. Thirty (30) cases were transferred to ADEC's Contaminated Sites Program for long-term cleanup and monitoring, and two cases were referred to the Department of Law for enforcement action. The State's response depots were accessed on 20 occasions for 16 spills.

### MAJOR RESPONSES IN 2011

**PUMP STATION 1 BOOSTER PUMP PIPING INCIDENT:** On January 8, 2011, Alyeska Pipeline Service Company (APSC) employees discovered a spill of crude oil inside the basement of the booster pump building at Pump Station 1 on the Trans Alaska Pipeline System (TAPS). Approximately 12,927 gallons of crude oil leaked from a 26-inch, concrete-encased discharge pipe, leading to a winter shut-down of TAPS. North Slope oil producers



significantly reduced oil production and initiated freeze protection procedures for wells, pipelines and other infrastructure during the shutdown. TAPS was restarted temporarily while APSC crews designed and fabricated a pipe to bypass the damaged discharge pipe. TAPS was shutdown a second time for installation of the bypass before resuming normal operation on January 17. Based on lessons learned from the incident, APSC managers re-evaluated "cold restart" procedures for a TAPS winter shutdown, installed pump station oil recirculation pipe loops that add heat to oil in transit, and reassessed out-of-service infrastructure. Oil production resumed without incident after the bypass was installed and no infrastructure damage resulted from the winter shutdown.

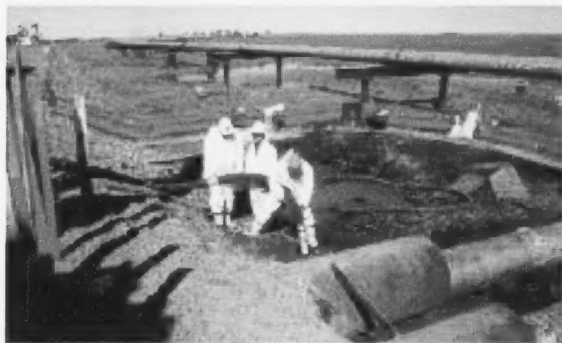
**M/V MORNING CEDAR ADRIFT INCIDENT:** On December 5, 2011, the 656-foot Singapore-registered cargo vessel *Morning Cedar*, carrying packaged lumber from Vancouver, British Columbia to Japan, lost steering approximately 10 miles north of Tanaga Island in the Aleutian Islands and began drifting. The ship, operated by Wallenius Marine Singapore, had 227,000 gallons of bunker C oil and 60,000 gallons of diesel fuel on board. The U.S. Coast Guard (USCG) diverted the cutter *Sherman* to assist the *Morning Cedar* and placed a helicopter and crew on standby at Adak Island, ready to provide further help if necessary, such as airlifting an ADEC Emergency Towing System to the stricken vessel. Two teams from the *Sherman* boarded the *Morning Cedar* on December 6, but were unable to help the crew repair the freely swinging rudder. By December 8, when engineers familiar with the *Morning Cedar's* steering gear arrived on the vessel, the crew was able to use the vessel's main engine and bow thruster to counteract her drift toward shore. The

crew and engineers completed temporary repairs to the steering system on December 9 and the vessel made way, escorted by the *Sherman*, to Dutch Harbor, arriving on December 11. On December 15, with permanent repairs completed, the *Morning Cedar* departed Dutch Harbor to continue her westward voyage.

**BPXA L-1 TEST-HEADER PIPELINE LEAK :** On July 16, 2011, 1,764 gallons of a mixture containing 60% methanol and 40% produced fluids (including some crude oil) spilled onto a gravel pad and into a freshwater tundra pond at the Lisburne Production Facility Drill Site L-1, at Prudhoe Bay. The spill occurred from the test-header pipeline during a pressure test intended to check newly-installed valves. Spill responders installed absorbent and shore-seal boom around the spill and used vacuum trucks to recover the spilled liquids from the tundra. An investigation team later discovered corrosion under some of the pipe's insulation in the underground road crossing where the pipe failed. Surface impacts will be evaluated during the 2012 growing season, and a rehabilitation plan may be required for damaged tundra. Approximately 7,000 square feet of tundra and gravel pad were affected by the incident.

**TUG NATHAN E STEWART AND FUEL BARGE:** On December 18, 2011, the K-Sea Transportation tug *Nathan E Stewart* and 300-foot fuel barge DBL-55, en route to Skagway, encountered a series of 30-foot waves in the Gulf of Alaska about 20 miles west of Cape Fairweather. Water entered the tug's air intakes, stopping both of her engines. The crew was able to restore power to the port-side engine, but it was not sufficient to navigate the articulated tug and barge in severe weather and seas. The barge carried 2.2 million gallons of diesel fuel, 1,028 gallons of aviation fuel and 700 gallons of other petroleum products; the tug had 45,000 gallons of diesel fuel and 500 gallons of lube oil on board. On December 19, the tug *Le Cheval Rouge*, escorted by the USCG cutter *Maple*, took the stricken tug and barge under a stern tow, and on December 21 the vessels arrived in Skagway, where the DBL-55's cargo was safely offloaded.

**T/V RENDA NOME FUEL DELIVERY:** In December 2011, after Nome fuel distributor Bonanza Fuels' winter inventory failed to arrive before Bering Sea ice cut off access to fuel barges, the company chartered a Russian tanker to make a first-ever-in-Alaska fuel delivery through the ice pack. Fearing a



Workers recover liquids spilled from the BPXA L-1 test header





## 2011-2012 IN REVIEW:

### TASK FORCE MEMBER AGENCY ACTIVITIES AND ACCOMPLISHMENTS

winter fuel shortage in Nome, Bonanza Fuels, through Vitus Marine LLC (Vitus), hired the ice-strengthened tank vessel *Renda* to deliver approximately one million gallons of diesel fuel and 400,000 gallons of gasoline to its tank farm. The USCG cutter *Healy*, returning from a 7-month science mission in the Arctic, was enlisted to break ice for the tanker. With the *Healy* available for only a limited time, ADEC's commissioner authorized an expedited process to amend Vitus's spill contingency plan to address the over-ice fuel transfer. The amendment was approved on January 5, as the *Renda* and *Healy* began their 11-day journey to Nome. ADEC staff spent that time working closely with local authorities and the USCG to review and refine the fuel transfer procedures, study the ice at the transfer site, and prepare to respond to a spill if necessary. Over three days, working in sub-zero temperatures, crews safely transferred the fuel through two hoses laid across the ice from the *Renda*, moored 2,200 feet offshore from the marine header. After traversing roughly 800 miles of ice-covered ocean together, the *Renda* and *Healy* finally parted ways in open water on January 30.

## NEW RULEMAKING

### *Underground Storage Tank Regulations*

A public comment period for underground storage tank regulation changes ended October 31, 2011. No comments were received and the regulatory language changes are undergoing a final legal review.

## PREVENTION INITIATIVES

### *Prevention Outreach*

Updates to ADEC's guidance for home heating oil tank spill prevention and response should be completed and available on the department's website by mid-2012. Individual ADEC spill response offices are pursuing community outreach and education initiatives in both the private and commercial sectors, including with fuel dealers and real estate organizations.

### *Clean Harbors Initiative*

Following two years of work toward the goal, in October 2011 Homer Harbor became the first certified Alaska Clean Harbor. Two additional harbors, the Seward Small Boat Harbor and Burkesboro Marina on Big Lake (in the Matanuska-Susitna Valley), have pledged to actively work toward certification. More information is available at the Alaska Clean Harbors website (see links below).

### *Pipeline Leak Detection Technology Conference*

ADEC hosted a Pipeline Leak Detection Technology Conference in September 2011 in Anchorage, the goal of which was to identify new pipeline leak detection technologies and practices that can be used to better manage environmental risk. The conference provided an opportunity for vendors, scientists and research and development entities to discuss those technologies and practices and present them for appraisal by ADEC. The conference included presentations on vapor detection technology, liquid sensing solutions, meter-based solutions, and fiber



*Fuel transfer hose laid across sea ice to the T/V Renda*



optic technology. A pipeline leak detection technology user group panel discussed the challenges faced when selecting leak detection systems. A conference report is under review and will be made available to the public after final editing is completed.

#### PREPAREDNESS INITIATIVES

##### *Emergency Towing System Project*

The primary purpose of this initiative is to broaden the availability of local emergency towing system (ETS) assets for rescuing disabled vessels. An ETS is a pre-staged package of equipment designed to let a vessel at one opportunity help a disabled vessel reach a place of refuge. It consists of a lightweight high performance towline, a messenger line, a lighted buoy and chafing gear, along with a procedures manual. The package can be airlifted to a ship by helicopter.

Six ETSs are currently staged at five locations in Alaska: Adak, Dutch Harbor (two ETSs), Kodiak, Anchorage, and Sitka. Funding was recently obtained to place additional ETSs in Ketchikan, Anchorage, Cold Bay, and Dutch Harbor. Multiple ETSs at one location contain different sizes of tow line: 7-inch for vessels of less than 50,000 deadweight tons and 10-inch for vessels of greater tonnage.

ADEC and the USCG, along with Princess Cruises, TEMSCO helicopters and the Amak Towing Company conducted an ETS exercise in Juneau in July 2011. The exercise saw the first deployment of an ETS using a commercial helicopter and the first attachment of an ETS to a cruise ship. A second exercise, focusing on use of the smaller ETS - which can be used by USCG cutters and buoy tenders - took place in Dutch Harbor in October 2011. Lessons learned from both exercises furthered the development of standard ETSs for Alaska and helped refine deployment procedures.

ADEC published a new statewide ETS manual in September 2011 that is currently available online (see links below), and a new training DVD was delivered to ADEC in December.

##### *Community Spill Response Enhancement Project*

This ongoing project, funded in part through the federal Coastal Impact Assistance Program (CIAP), places spill response containers at key coastal



*A US Coast Guard helicopter sling loads an Emergency Towing System onto a ship during an exercise*

locations to facilitate rapid response by trained local personnel. ADEC is coordinating with the USCG to determine optimum locations for the containers to ensure maximum coverage of coastal areas. The initial spill response container purchased under this grant was placed in 2011 at Pilot Point. Another ADEC-funded container was delivered to Homer. Current plans are to place additional containers in Kotzebue, Nome and Seward. A community that enters into a Community Spill Response Agreement with ADEC is not only provided response equipment but is also eligible to be reimbursed for time and resources expended on spill response. It is also eligible for training to maintain responders' HAZWOPER certifications. In the fall of 2011 ADEC staff helped the Eyak Native Association deliver a two-day spill course and HAZWOPER refresher to spill responders in Cordova. ADEC is currently working with EPA and a non-profit organization to develop two-day spill response courses for other tribes and rural communities.



## 2011-2012 IN REVIEW:

### TASK FORCE MEMBER AGENCY ACTIVITIES AND ACCOMPLISHMENTS

#### ***Nearshore Operation Response Strategy Project***

Based on lessons learned during the Deepwater Horizon event, ADEC staff have begun developing nearshore protection strategies for Alaska's coast, identifying equipment, personnel and logistics needed to support nearshore task forces and shoreline work crews. Both water-based and aerial support requirements have been identified. The next step is to further discuss the draft concept with industry and the oil spill cooperatives. The eventual goal is to incorporate the finished product into the Spill Tactics for Alaska Responders (STAR) Manual for cross-referencing in the subarea and Unified plans.

#### ***Geographic Response Strategies (GRS)***

ADEC staff have begun working with a contractor to develop GRS for the Bristol Bay and Western Alaska subareas. Initial GRS Workgroup meetings were held in Dillingham and Bethel in early 2012 to discuss the draft site selection matrix and recommended zones. GRS are map-based plans for selected sensitive areas, designed to save time during the critical first

hours of a spill response by identifying specific response resources and deployment configurations that can be used to protect those areas.

#### ***Potential Places of Refuge (PPOR)***

PPOR documents compile information that can help incident managers make decisions about specific sites that might be used to harbor a vessel in distress. The PPOR project for the Northwest Arctic and North Slope subareas that began in 2010 was completed in July 2011. The PPOR Workgroup identified 16 PPORs for the North Slope subarea and 18 PPORs for the Northwest Arctic subarea. A project to develop new PPOR documents for the Bristol Bay and Western Alaska subareas started up in October 2011; initial meetings were held in Dillingham and Bethel in early 2012. The City of Unalaska has obtained partial funding from the Denali Commission to install a mooring buoy at Broad Bay on Unalaska Island for use by vessels in distress. ADEC staff have been consulting with city personnel on permitting and other aspects of the project.



*Fishing vessels in a nearshore task force tow a Current Buster oil collection boom during an exercise.*



### ***Unified and Subarea Plans***

EPA, USCG, and ADEC staff are currently working on an administrative change to the Unified Plan to update contacts, memoranda of understanding/agreement and information on spill response capabilities. Change 1 to the Northwest Arctic Subarea Plan was published in February 2012. Agency and tribal reviews of Change 2 to the North Slope Subarea Plan and Change 2 to the Southeast Subarea Plan are complete; public review of the North Slope subarea plan began in February 2012. New GRS and PPOR sections for Change 1 to the Bristol Bay Subarea Plan and Change 1 to the Western Alaska Subarea Plan will be completed by June 30, 2012, and the updated plans will be published soon thereafter.

### ***Offshore Continental Shelf Readiness Planning***

In December 2011 Shell Offshore Inc. hosted a Chukchi Sea/Beaufort Sea spill response workshop in Anchorage attended by representatives of Shell Offshore, the USCG and ADEC. Goals were to have participants gain a shared understanding of the scenarios, response strategies and resources; to develop alignment between the USCG, ADEC and Shell Offshore in preparation for exercises; and to identify issues requiring resolution prior to the 2012 drilling season. Discussions were productive and informative for all attendees. A practice tabletop spill response exercise involving a full Incident Management Team is tentatively scheduled for March 2012 in Anchorage. A formal tabletop exercise (to meet the Bureau of Safety and Environmental Enforcement's condition of approval to proceed with exploratory drilling) is planned for May 2012.

### ***Aleutian Islands Risk Assessment***

The first phase of the Aleutian Islands Risk Assessment (AIRA) is complete. A summary report was released that includes six technical studies, as well as the recommendations of an advisory panel of stakeholders and maritime transportation experts. The technical studies include a risk report analyzing the likelihood of spills based on vessel traffic through the Aleutians and the development of a risk matrix to analyze the potential consequences of spills from marine vessels. The advisory panel focused on identifying and prioritizing measures to mitigate the risks posed by maritime traffic through the Aleutian Islands Region. The guiding principles

were that prevention measures take priority over response measures and all measures should be realistic and practical. Some of the measures identified by the panel are recommended for immediate consideration by government decision makers, while others will require additional study in the second and final phase of the risk assessment.

Subsequent to the AIRA Advisory Panel's recommending expanded vessel traffic coverage as a risk reduction measure that warranted immediate implementation, the AIRA Management Team approved funding an extension of the Automatic Identification System (AIS) network in the Aleutians. An AIS radio was installed on Adak Island in January 2012 and an additional radio will be installed at Nikolski on Umnak Island; together, the two radios will extend AIS coverage to an additional 25,000 square miles of ocean. The draft Request for Proposals for Phase B of the assessment has been circulated for review and comment. The four risk reduction options to be examined include: increasing rescue tug capability in the Aleutians; increasing salvage and spill response capability in the Aleutians; determining potential boundaries of International Maritime Organization Particularly Sensitive Sea Areas in the Aleutians and developing recommendations for associated protective measures; and strengthening the Aleutians Subarea Contingency Plan.

### ***Cook Inlet Risk Assessment***

The first meeting of the Cook Inlet Risk Assessment (CIRA) Advisory Panel convened in Anchorage in October 2011. The Management Team, representing ADEC, USCG and the Cook Inlet Regional Citizens' Advisory Council, set the tone for the project by clearly defining the goal of a cooperative and open process. The panel, consisting of 23 representatives of Cook Inlet stakeholder groups, began discussions on the scope and expectations of the project. The panel reviewed and discussed a draft vessel traffic study, the final version of which has now been published on the CIRA website.

### ***Arctic Council***

The Director of ADEC's Division of Spill Prevention and Response has become a formal member of the U.S. delegation to the Arctic Council. Alaska is the only U.S. Arctic state and has significant interests in shipping and offshore oil and gas exploration and development. The Arctic Council is a high-level





## 2011-2012 IN REVIEW:

### TASK FORCE MEMBER AGENCY ACTIVITIES AND ACCOMPLISHMENTS

---

intergovernmental forum for promoting cooperation, coordination and interaction among the Arctic states, including the involvement of indigenous communities, on common Arctic issues, especially issues of sustainable development and environmental protection. Member states include Canada, Denmark (including Greenland and the Faroe Islands), Finland, Iceland, Norway, the Russian Federation, Sweden, and the U.S. The Council has two major projects underway. The first is to develop a mutual aid agreement between the member nations that would provide for notification of significant releases and assistance in combating a release. The second is to develop best prevention practices for Arctic shipping, oil and gas exploration and development, pollution from land-based facilities and maritime surveillance.

#### *Arctic Caucus Oil Spill Task Force*

Representatives of ADEC's Division of Spill Prevention and Response met in August 2011 in Yellowknife, Northwest Territories, and established the Arctic Caucus Oil Spill Task Force. The Task Force will address spill prevention, preparedness and response issues of common interest such as offshore oil and gas exploration in the Beaufort Sea, pipelines and increased shipping. Transboundary oil spill planning in the Beaufort Sea (CANUSNORTH) is of interest and, although not as advanced as that for the border with British Columbia (CANUSDIX), will be receiving increased attention as offshore drilling commences in the summer of 2012.

#### *Statewide Hazmat Workgroup*

In late 2011 ADEC and EPA initiated a seafood processing facility outreach project to inform facility owners and managers of the emergency release and routine, non-release reporting requirements (e.g., Tier Two reports) for hazardous substances. An outreach package was mailed to all seafood processing facilities in Alaska in January 2012.

ADEC staff also coordinated the Alaska Shield 2012 Hazmat Symposium and Field Exercise, conducted in February 2012 in Fairbanks. The symposium provided classroom presentations on a variety of hazmat subjects followed by a daylong field exercise. The Statewide Hazardous Material Response (level A) Teams suited up and responded

to simulated releases of extremely hazardous substances from a freight train accident. A total of 36 level A team members participated in the field exercise and over 100 first responders attended the symposium.

#### *Drills and Exercises*

ADEC staff participated in more than 22 spill response drills and exercises in 2011, involving a variety of facilities. Major drills included: Delta Western Dutch Harbor Tanker Drill, Prince William Sound Nearshore Follow-up Exercise, Alyeska Valdez Marine Terminal Summer Exercise, North Slope Mutual Aid Drill, CANUSDIX 2011, BP Prince William Sound Tanker Exercise, and Tesoro Incident Management Team Drill.

#### *Inspections*

ADEC staff conducted 46 inspections of oil terminals and tank farms, exploration, production and refining facilities, crude oil transmission pipelines, tankers, non-tank vessels and tank barges during 2011.

#### *Industry Contingency Plans*

ADEC staff reviewed and approved 33 new or renewal oil discharge prevention and contingency plans, as well as 64 plan amendments, not including non-tank vessel plans.

In November 2011 ADEC issued a conditional approval to renew the Trans Alaska Pipeline System (TAPS) contingency plan for five years. The most significant condition requires that the operator amend the plan to include annual commodity-release tests of the pipeline leak detection system.



#### PROGRAM INFORMATION

- ADEC SPAR Program:  
<http://dec.alaska.gov/spar/index.htm>
- State Spill and Disaster Response Plan:  
<http://www.dec.state.ak.us/spar/perp/plan.htm>
- Statewide Hazmat Response:  
<http://www.dec.state.ak.us/spar/perp/hazmat.htm>
- Emergency Towing System:  
<http://dec.alaska.gov/spar/perp/ets/index.htm>
- Alaska Geographic Response Strategies:  
<http://www.dec.state.ak.us/spar/perp/grs/home.htm>
- Potential Places of Refuge:  
<http://www.dec.state.ak.us/spar/perp/ppor/home.htm>
- Aleutian Island Risk Assessment:  
<http://www.aleutiansriskassessment.com/>
- Cook Inlet Risk Assessment:  
<http://www.cookinletriskassessment.com/>
- Alaska Clean Harbors  
<http://alaskacleanharbors.org/>

*A Hazmat team member practices cold weather response during the 2012 Alaska Shield field exercise*







2011-2012 IN REVIEW:

TASK FORCE MEMBER AGENCY ACTIVITIES AND ACCOMPLISHMENTS

# British Columbia

ENVIRONMENTAL EMERGENCY PROGRAM,  
THE BRITISH COLUMBIA MINISTRY OF ENVIRONMENT

## PROGRAM MISSION

The Ministry of Environment works to protect people, property and the environment from spill hazards through its Environmental Emergency Program. The program's mission statement is Exemplary Environmental Emergency Management through Leadership, Organization, Teamwork, and Shared Responsibility.

On average, 3,000 to 3,500 spills are reported to the Ministry annually; most are accidental oil and hazardous material releases. Highly trained Environmental Emergency Response Officers (EEROs) located in ten regional offices throughout the province are available to respond to these spills. For large and complex spill incidents, the Ministry can also activate its Incident Management Team (IMT). The team is tasked with the provincial delivery of the BC Marine Oil Spill Response Plan, the BC Inland Spill Response Plan and the BC Hazardous Material Response Plan. The team functions according to the internationally accepted and provincially adopted Incident Command System which includes the application of Unified Command with the Responsible Party (spiller) and other responding jurisdictions.

The Environmental Management Branch in Victoria (Headquarters) undertakes environmental emergency planning for both the regional Environmental Emergency Response Officers and the provincial Incident Management Team.

## PROGRAM STAFFING

The program has been fortunate in these challenging economic times to add capacity to our Environmental Emergency Program. An additional full-time Environmental Emergency Response Officer has joined our Surrey (Greater Vancouver) area office to help manage the workload in what is our busiest region for spill incidents. We have also gained additional support in our headquarters office in Victoria with the addition of a new staff member who is supporting our program policy development work. Commencing in September 2011, the program began hosting an Aboriginal Youth Intern who is

assisting the program with First Nations outreach and engagement related to spills. The intern will be with the program until June 1, 2012 at which point the intern undertakes a three-month placement working with an Aboriginal organization.

The Ministry's Incident Management Team (IMT) for spills is being evaluated to ensure that the team has the required range, depth and geographic coverage of technical specialists needed to manage spills and their consequences. During the fall 2011 IMT meetings members developed updated lists of technical specialists and the most appropriate ministries and program areas to recruit them from across the provincial government. In 2012, the goal is to actively recruit new IMT members to fill any of the identified gaps and provide information sessions so that their supervisors and managers have a clear understanding of the role and responsibilities of IMT members. Program staff is also looking at creative ways to deliver training to IMT members that reduces travel and time demands.

## SIGNIFICANT SPILLS

The province did not experience any major marine spills during the last year, although many moderate and small spills were reported and addressed by our partners in the Canadian Coast Guard. There were a number of potential incidents involving large commercial vessels losing power or suffering damage at sea. Fortunately, no pollution incidents resulted in these incidents but they remind us of how easily a spill could occur and the need for preparedness.

The fall of 2011 saw a rash of residential home heating oil spills in the province. These spills can prove very costly to homeowners to remediate and even more so when off-site migration occurs resulting in additional response costs that the spiller is held liable for under the province's "polluter pays" system. One such spill in the City of Victoria made its way into Swan Creek and the Colquitz River where it impacted spawning coho salmon and resulted in numerous odor complaints. The spill was originally reported by local salmon enhancement volunteers who were conducting fish counts along



the river. Initially, the spill could not be traced to a source; however, when the homeowner ordered another fuel delivery the oil reappeared in the creek and this time responders were able to trace it back to the source. Although the volume of the spill was relatively low, the impacts on this small watershed were significant especially for the community volunteers working to cleanup these urban waterways and enhance fish populations. The Ministry has been using media interest in this and other home heating oil incidents to remind residents of the need to inspect and maintain their home heating oil systems to prevent spills and protect their finances.

Another notable incident since the last report included the loss a mining truck into Strohn Lake in Northern British Columbia on November 1, 2011. In this incident, the truck lost control and ended up in Strohn Lake, which is part of Bear Glacier Provincial Park, taking with it the three boxes of ore it was hauling. A total of 49,000 kilograms of zinc oxide were contained in the load that is now sitting in approximately 40 feet of water. Due to the risk of avalanches and icing of the lake surface, future recovery work will not be undertaken until spring 2012, when conditions are safer. A monitoring and sampling program has been initiated to assess impacts and ensure the safety of downstream water for the community of Stewart.

Another challenging incident involved the illegal dumping of waste from a clandestine drug lab onto private property. As the owners of the rural property

could not be immediately located the Ministry had to undertake the management of the incident and incurred \$80,000 in costs to address the immediate public safety and environmental concerns the hazardous waste presented. Since the introduction of these wastes was the result of criminal activity and not associated with the property owners, the Ministry decided not to pursue cost recovery. Nevertheless, the incident has resulted in contamination of the property that presents a financial challenge for the elderly property owners to address, since significant costs are involved in order to ensure that the property meets provincial cleanup criteria.

#### LEGISLATIVE REVIEW

The Environmental Emergency Program continues work on possible new measures to ensure that both the province and industry are adequately prepared to address spills in the province. Increasing transportation of hazardous materials through the province and natural resource development proposals are raising concerns about spills in the province and the ability of federal and provincial governments - as well as industry - to prepare for, mitigate, respond to and recover from spills.

The ministry is reviewing industry funding models in other jurisdictions that are used to fund their spill response programs and provide spill response funds for those situations when the spiller is unidentified, unable or unwilling to manage and pay for the response and remediation of spills. The program is



*Water sampling during a  
home heating oil spill to  
the Colquitz River*



## 2011-2012 IN REVIEW:

### TASK FORCE MEMBER AGENCY ACTIVITIES AND ACCOMPLISHMENTS

also reviewing the marine spill response organization in place for marine spills on Canada's west coast to determine how this concept might be applied to terrestrial spills. The third area of legislative review is focused on natural resource damage assessment models used in other jurisdictions and how these might be applied in British Columbia. Currently, provincial legislation enables the government to require spillers to undertake environmental restoration for spills, or conduct restoration itself and recover the costs from a responsible party. However, the province does not have a process in place to determine what amount of restoration is required or to ensure that it is consistent with the principle of "reasonableness" as outlined in the current legislation.

Based on further direction from government, the program may be moving forward with an "intentions paper" as well as wider industry and stakeholder engagement to explore potential legislative changes.

#### MAJOR PROJECTS

##### *Oiled Wildlife*

The province continues its work with the Canadian Wildlife Service and the Department of Fisheries and Oceans to develop a combined federal-provincial oiled wildlife policy for use in British Columbia. The working group has identified some additional areas for inclusion based on the fall 2011 CANUSDIX meetings in Ketchikan, Alaska. Once the working group has reached agreement on the policy it will then be presented to industry and oiled wildlife response organizations for additional feedback and refinement.

##### *Spill Database*

The Ministry is working on improvements to our management of spill incident data in the province. Staff is working with Emergency Management British Columbia, who provides our provincial spill reporting call center, to develop means to export the data they collect into a format that is easier for our Environmental Emergency Response Officers to use and update. It is hoped that the improvements will also facilitate spill data analysis, reporting and possibly allow for key incident information to be publicly available via the internet.

##### *Provincial Flood Plan*

Emergency Management British Columbia is

currently revising the provincial flood plan and we are assisting with these revisions. The Environmental Emergency Program has found itself with an increased role during flood events in order to prevent the introduction of hazardous materials and pollution into the environment when homes, building and other infrastructure are threatened. The revisions to the provincial flood plan are intended to improve understanding of the roles and responsibilities of provincial agencies and local government.

##### *British Columbia Emergency Response Management Systems (BCERMS)*

Program staff have been working with other provincial agencies with emergency response responsibilities on reviewing and updating BCERMS. BCERMS is the provincial framework for managing emergencies based on the Incident Command System and providing support to local governments during emergencies. Program staff are involved in a number of the sub-committees dealing with specific aspects of BCERMS.

##### *Chemical Biological Radiological Nuclear Explosive (CBRNE)*

CBRNE is the Canadian equivalent to Weapons of Mass Destruction in the United States. Under the direction of Emergency Management British Columbia the Ministry is participating in the provincial CBRNE committee and the development of a provincial CBRNE team. Based on the Environmental Emergency Program's expertise, equipment and training in hazardous material response there is a clear role and linkage to CBRNE incidents.

#### ANNUAL TRAINING AND EXERCISES

##### *Incident Management Team*

The 2011 Annual Incident Management Team (IMT) training was held in Richmond, BC on November 22 and 23, 2011. The first day's session included a number of updates on program activities and developments, as well as presentations on the Goldstream river tanker truck spill and the oiled wildlife response to the Enbridge Kalamazoo Michigan spill. Day two was a training session on In-situ burning and chemical dispersants and included participation from other response agencies and key stakeholders. The inclusion of key stakeholders,



including representatives from the oiled wildlife non-governmental organizations, proved to be very valuable to the invited participants who stated that this training helped them better understand the concept of achieving net environmental benefit and increased their comfort with the idea of using these response tactics.

#### ***Environmental Emergency Response Officer (EERO) Refresher Training***

The Interior region hosted the 2011 Environmental Emergency Response Officer (EERO) training in Salmon Arm during the last week of March 2011. The training included the use of self contained breathing apparatus and fully encapsulating hazmat suits (level A), review and practice with a variety of sampling and monitoring equipment, and practice in the use of chemical identification hazardous materials kits for the identification of unknown chemicals at spills.

The week's training also included a multi-incident full-scale exercise conducted in partnership with the Columbia Shuswap Regional District's emergency program. The exercise scenario included both a train derailment resulting in the release of persistent hydrocarbon product from a rail tanker, as well as a multi-casualty accident involving a collision between a helicopter and a school bus. The exercise was designed to test the local emergency program's Emergency Operations Center's ability to address multiple incidents. For the Ministry of Environment, the exercise presented an opportunity to partner with local response agencies, build important relationships with participating industry and response contractors, and meet staff training requirements.



*Practice with Level A HAZMAT suits with self-contained breathing apparatus at the Annual Environmental Emergency Response Officer training in Salmon Arm*

#### ***International Exercises***

The province participated in both the CANUSPAC (Oak Harbor, Washington) and CANUSDIX (Ketchikan, Alaska) spill exercises in 2011. CANUSPAC and CANUSDIX represent annexes of the Canada-U.S. Joint Contingency Plan for spills impacting the transboundary waters between British Columbia and Washington State and between British Columbia and Alaska. 2011 marks the first time the province participated in the exercise planning committees for these exercises; this proved of great value in and of itself, as it helped build relationships and trust between U.S. and Canadian agencies that would be involved in a transboundary response.



*Testing video conferencing equipment between the U.S. and Canadian Command Posts during the CANUSDIX exercise*

Additionally the province participated in the annual exercises of the Western Canada Marine Response Corporation (WCMRC) as well as a number of individual company spill response exercises around the province. The WCMRC held a 1000 tonne tabletop exercise in Campbell River, BC in June 2011. The exercise was based on a historic cruise ship grounding incident in the area and included participation from Princess Cruise Lines, which played the role of the responsible party.

#### ***PROGRAM INFORMATION***

Further Information on the province's Environmental Emergency Program can be found at our internet site at the following address: <http://www.env.gov.bc.ca/eemp/>





2011-2012 IN REVIEW:

## TASK FORCE MEMBER AGENCY ACTIVITIES AND ACCOMPLISHMENTS

California

THE CALIFORNIA DEPARTMENT OF FISH AND GAME'S  
OFFICE OF SPILL PREVENTION AND RESPONSE (OSPR)

### PROGRAM MISSION

The mission of the Office of Spill Prevention and Response (OSPR) is to provide best achievable protection of California's natural resources by preventing, preparing for and responding to spills of oil and other deleterious materials, and through restoring and enhancing affected resources.

OSPR, a division of the California Department of Fish and Game (DFG), is the lead state agency for spill response in California. OSPR was established by the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act of 1990 (Act). The Act provides the OSPR Administrator with authority to direct spill response and cleanup, as well as natural resource damage assessment (NRDA) and restoration.

### OSPR'S SHARED VISION

We have an organization that:

- Is the Premier Agency for all aspects of spill prevention, response and restoration;
- Operates with integrity;
- Is transparent and open;
- Values one another;
- Communicates and creates connections;
- Anticipates needs and is proactive;
- Inspires confidence and creativity; and
- Provides great service.

### SPILL DATA 2011

OSPR's Spill Tracking Analysis Unit received and reviewed 7,682 California Emergency Management Agency (CalEMA) Hazardous Material Spill Reports for the 2011 calendar year. From these, OSPR received 1,914 petroleum related spill incident reports. Of the reports received, 969 were identified as inland petroleum incidents and 931 were identified as marine petroleum incidents.

OSPR Field Response Teams - consisting of Fish and Game Wardens (law enforcement), Environmental Scientists and Oil Spill Prevention Specialists - responded to all 931 reported marine petroleum

incidents. Of the 969 inland petroleum incidents reported, Fish and Game Wardens responded to 380 of these reports. The majority of the remaining 589 reported inland petroleum spills did not impact a state waterway, did not involve sensitive habitats, or did not immediately affect the State's fish or wildlife resources - parameters which define DFG's jurisdiction.

### 2011 MAJOR INCIDENTS

#### *Deepwater Horizon*

Early 2011 found many of OSPR staff finishing their duties with the Deepwater Horizon spill in the Gulf of Mexico, which had started on April 20, 2010. More than 70 OSPR and DFG personnel rotated through Deepwater Horizon over an 18-month period; scientific and field response experts provided invaluable aid to the Gulf response team for shoreline cleanup assessment, geographic information systems and applied response technology. The response clearly demonstrated California's expertise in oil spill response and showed that the Incident Command System (ICS) works regardless of the size of the spill.

#### *Javon Canyon (March 2011)*

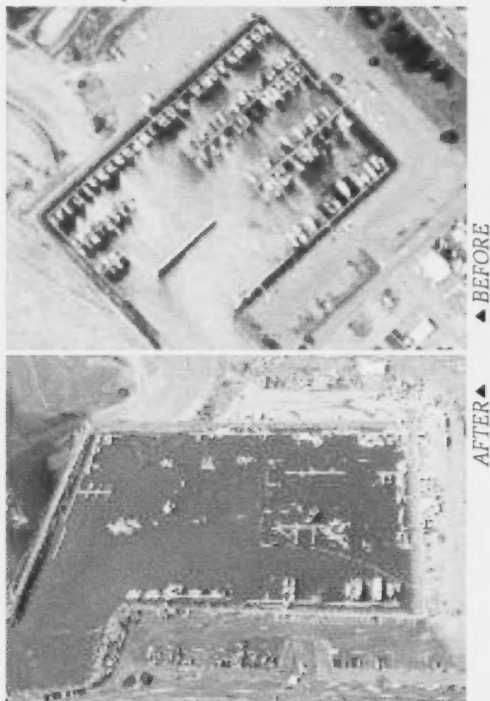
On March 7, a landslide ruptured an oil pipeline operated by Vintage Production California, releasing crude oil and produced water into Javon Canyon, Javon Creek and the Pacific Ocean near Faria Beach in Ventura County. It resulted in the closure of a stretch of shoreline to fishing in Ventura County from March 8 -9. On March 17, DFG, the U.S. Coast Guard (USCG) and the U.S. Fish and Wildlife Service completed their assessment, determining that the beach needed no further clean up, but that the creek needed additional monitoring and maintenance of the spill containment dams.

#### *California Tsunami Response (March 2011)*

On March 11, 2011 a magnitude 8.9 earthquake hit Japan's northeastern coast, causing a massive tsunami that in turn generated a smaller tsunami event along the California coastline. The resulting



*Crescent City Harbor:*



*A crane lifts a vessel from Crescent City Harbor following the tsunami.*

large wave surges caused damage to ports, harbors and infrastructure in California, particularly in Santa Cruz and Crescent City harbors, where numerous sunken and otherwise damaged vessels posed serious pollution threats.

At the peak of the response, 77 OSPR and other DFG personnel were involved with the response at one time. Crescent City sustained extensive damage to vessels and port infrastructure, requiring a month-long response on the part of USCG, DFG and local agencies. Although some fuel releases occurred as a result of damage to vessels, field staff did not observe any oil-related wildlife or sensitive habitat impacts. In addition, DFG staff attempted to minimize disruption of fisheries (mainly crab) activities at Crescent City Harbor during the response effort.

Due to shoreline and property damage, California Governor Jerry Brown issued an emergency proclamation for Del Norte, Humboldt, San Mateo and Santa Cruz Counties. Estimated monetary damages in California totaled \$48 million, qualifying this disaster for FEMA funding.

*Yellowstone River, Montana (July 2011)*

In July 2011, a break occurred in a 12-inch pipeline owned by ExxonMobil, resulting in a release of crude oil into the Yellowstone River approximately 20 miles upstream of Billings, Montana. Montana called upon OSPR to send assistance. OSPR deployed an incident manager, a pipeline technical specialist, a response operations manager, an environmental unit leader, and a shoreline assessment expert. OSPR calculated that over 50,000 gallons of oil entered the river during flood stage, before the pipeline was shut off. The pipeline technical specialist has continued to provide support to Montana as re-requested through the Mutual Aid Compact process.



*Randy Imai at Yellowstone incident with US Secretary of the Interior Ken Salazar*



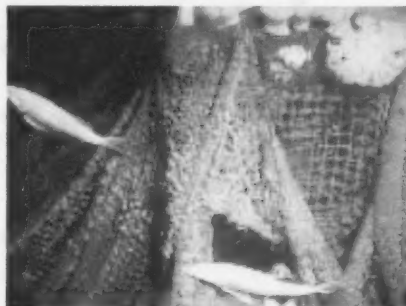
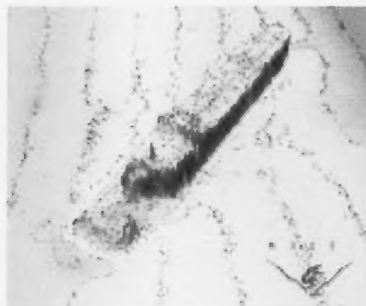


## 2011-2012 IN REVIEW:

### TASK FORCE MEMBER AGENCY ACTIVITIES AND ACCOMPLISHMENTS

#### *The SS Montebello (October 2011)*

In October of 2011, after years of effort and planning, OSPR and the USCG completed an assessment of the *SS Montebello*. The *S.S. Montebello* sank after a Japanese submarine torpedoed the large oil tanker on December 23, 1941. The *Montebello* broke apart and sank, landing upright with her bow broken off and landing apart from the majority of the wreckage. Working with a USCG contracted dive team, the Unified Command gathered oil, hull and sediment samples. From the surveys completed and data gathered, Unified Command determined that the *Montebello* posed no substantial threat to the marine environment.



*SS Montebello: 3-D Sonar Image (left), Net draped over the wreck (right)*

#### *Stanley Hall, Strawberry Creek, UC Berkeley (December 2011)*

On Dec. 10, University California at Berkeley authorities received notification of diesel spill from a fuel tank (maintained for the emergency generators) into the basement of Stanley Hall, one of its laboratory buildings. Approximately 1,700 gallons of diesel fuel spilled and sump pumps in the basement moved some of the fuel out into Strawberry Creek, which leads to the Berkeley Marina. Crews removed oil from the creek and in January 2012 announced that active cleanup efforts would end, although monitoring of the area would continue for possible residue in pockets within the storm drain system. Responders were able to recover nearly 60 percent of the product.

#### *Tug Tiger, Richmond (December 2011)*

On Dec. 11, OSPR responded with the USCG to the sinking of the *Tug Tiger*, a decommissioned 205-foot former Navy tug, moored at a graving dock in the

Port of Richmond. The *Tug Tiger* was berthed with the *Tug Lion*, which had to be defueled and removed before efforts to dewater and then defuel the *Tug Tiger* could continue, since the starboard side of the *Tug Tiger* rested below the *Lion*. On Feb. 6, 2012 - after construction of a cofferdam - responders dewatered and refloated the *Tug Tiger* with defueling following. The tug will be removed for salvage.

#### SETTLEMENT OF COSCO BUSAN

OSPR and its multiple partners saw the conclusion to the 2007 *Cosco Busan* oil spill as a \$44.4 million settlement was reached with Regal Stone Limited and Fleet Management Limited, the companies responsible for the container ship *Cosco Busan*, which spilled 53,000 gallons of oil into the bay after hitting the San Francisco-Oakland Bay Bridge. Of the \$36.8 million designated for natural resource restoration, approximately \$32.3 million will be spent on a wide variety of restoration projects around the San Francisco Bay Area. About \$5 million is set aside for bird restoration, \$4 million for habitat restoration, \$2.5 million for fish and habitat (eelgrass) restoration, and \$18.8 million for recreational use improvements. An additional \$2 million will fund restoration planning, administration and oversight, with any unused funds to be spent toward more restoration. To date, this is the largest natural damage restoration settlement achieved under the national Oil Pollution Act of 1990.



*Tug Tiger*

**NEW LEGISLATION***(ENACTED JANUARY 1, 2012)*

AB 1112 (Assemblyman Jared Huffman) went into effect on Jan. 1, 2012. It requires OSPR to implement a comprehensive risk-based monitoring program of bunkering and lightering operations at berth and at anchor. It authorized an increase of the per barrel fee from \$.05 to \$.065; OSPR needed this increase to maintain baseline operations. The legislation also stipulates that OSPR have a complete audit by the Bureau of State Audits, which was initiated in December 2011 and will continue until mid 2012. In addition to the per barrel fee, regulation changes increased the nontank fee from \$2,500 to \$3,250, also effective Jan 1, 2012. Nontank vessels carry oil as fuel rather than cargo, so they do not contribute to the per barrel fee, yet as the past has shown, these vessels can pose a significant threat should they have an oil release.

**NEW RULEMAKING*****Reasonable Worst Case Spill Volume for Offshore Platforms***

In light of the Deepwater Horizon platform spill, which was an uncontrolled release for several months, Executive Order #S-16-10 was issued on October 12, 2010, to require that contingency plans for offshore platforms accommodate longer uncontrolled oil releases that could result from any natural or man-made incident. Specifically, the Reasonable Worst Case Spill Volume calculation for offshore platforms has been amended to increase the daily production volume factor in the calculation from seven (7) days to thirty (30) days. The package was reviewed and approved by the Office of Administrative Law and the regulations went into effect on April 11, 2011.

***Oil Spill Contingency Plans***

The changes included in this package are primarily due-process changes to discourage late plan submittals. Also included were steps providing for an all "electronic" submittal; removal of the "post spill review" requirement; and several minor changes/corrections. The package was approved May 3, 2011 and went into effect June 2, 2011.

***Certificates of Financial Responsibility (COFR)***

These amendments clarify when all COFR evidence

of renewals needs to be submitted to OSPR. The package was approved July 14, 2011 and went into effect August 13, 2011.

***Local Government Grant Regulations***

Amendments were made to the local government Contingency Plan regulations to make the local plans more usable by aligning them with the information needed by the different Incident Command Sections (i.e., Command, Operations, Planning, Logistics and Finance) during a spill response. Redundant and/or obsolete requirements were removed. The package was approved July 22, 2011 and went into effect August 21, 2011.

***Nontank Vessel Fee Increase***

OSPR received approval on November 22, 2011 for an emergency regulation covering an increase to the nontank vessel fee and making corresponding changes to the COFR Nontank Vessel application. This increase went into effect on January 1, 2012. OSPR believes that the additional revenue generated more appropriately approximates OSPR's costs to fully implement a comprehensive nontank vessel program. The emergency regulations will remain in effect for 180 days (until June 30, 2012) and will then need to be followed-up with a "regular rulemaking." The regular rulemaking is not in process for the fee increase. The Notice of for this Rulemaking was mailed on January 13, 2012.

**SPILL PREPAREDNESS**

OSPR has authority to conduct announced or unannounced drills to ensure that a plan will work in an oil spill emergency. In 2011, OSPR's Readiness Unit conducted 40 unannounced planholder drills and 13 oil spill response organization (OSRO) rating drills. The drills demonstrate an OSRO's ability to meet requirements of oil spill response in a skillful and timely manner. This year's drills focused on the immediate and two-hour containment and skimming plan holder requirements. Numerous Oil Pollution Risk Area (OPRA) sites were also included in the unannounced drills. OSPR maintains a reliable and thorough unannounced OSRO drill exercise program, the results of which are practiced on a daily basis by the rated OSROs required to protect California's marine waters.

OSPR staff exceeded their previous attendance record for planholder drills by participating in 143



## 2011-2012 IN REVIEW:

### TASK FORCE MEMBER AGENCY ACTIVITIES AND ACCOMPLISHMENTS

drills in 2011 (132 with facilities and 11 with vessels). Drills and exercises help California maintain its readiness for response and OSPR's participation enhances the cooperation and relationships we develop with our industry and federal partners. This type of effort keeps California in the forefront of response readiness across the nation.

#### CONTINGENCY PLANS

OSPR processed more than 1,800 contingency plan revisions and approved 420 new plans. They also updated the State's Area Contingency Plans. The Area Contingency Plan updates occur every three years and take tremendous time and effort from the field response teams. California has some of the best prevention and protection strategies in the nation because of the strategy development, testing and response design done at this level.

#### SPILL PREVENTION

Vessels coming into California marine waters continue to experience loss of propulsion (LOP) incidents at a frequency far greater than occurred prior to the State's 2009 implementation of the Low Sulfur Distillate Fuel (LSDF) regulations.

OSPR's prevention strategies included a new focus this year: providing suggestions to industry on how to operate vessels when using the low sulfur distillate fuels. California had seen a significant increase in the number of loss of propulsion (LOP) incidents following implementation of regulations that required the fuel switch to reduce air pollution. The suggestions included in OSPR's guidelines went "viral" in the industry. The guidelines have been published in the US Coast Pilot #7, in the British Admiralty Sailing Directions (expected in 2012), and in more than 20 industry publications. This resulted in an invitation to OSPR staff to the 2012 International Maritime Organization Conference, for a panel discussion on fuel switching. Some industry members also distributed the guidelines to their fleets.

California also saw 10,161 vessel arrivals in 2011, a 19 percent increase over 2010. With the increase in ship arrivals, vessel LOP incidents for 2011 totaled 93, an increase of 63 percent over the 57 reported in 2010. This increase occurred despite fuel switching publication and distribution. OSPR continues efforts to improve education, training, and shipboard

practices to reduce the numbers of LOPs occurring.

In 2011, OSPR monitored 259 bunker operations, with 35 of those occurring at anchorage. There were 6900 bunker notifications (compared to 6,606 in 2010) so 3.75 percent of those were monitored in 2011. There were no bunkering spills in 2011, whereas there were four bunker spills in 2010. Credit for no bunker spills occurring in 2011 must be given to the bunkering companies, bunkered ships and the Harbor Safety Committees that addressed and followed best maritime practices for bunkering.

#### NATURAL RESOURCE DAMAGE ASSESSMENT (2010 - 2011)

The past year has been very busy for the Natural Resource Damage Assessment (NRDA) program between drills and case updates. The details follow.

##### *NRDA Drills and Exercises*

NRDA was included as part the Chevron Eureka Terminal Table Top Drill and Semi-Annual Equipment Deployment exercise on September 21, 2011. For a portion of the drill, a NRDA Representative reported to the Eureka Terminal Incident Command Post and tested communication and coordination procedures with the Situations, Environmental, and Health & Safety Units. A separate NRDA Command Post was established at the DFG Regional Office in Eureka and carried over to a second day on September 22, 2011. The following state and federal agencies, as well as Chevron, Inc., (i.e., the NRDA Team) participated in the NRDA portion of the drill: the Department of Fish and Game, Office of Spill Prevention and Response (DFG-OSPR), the U.S. Fish and Wildlife Service (USFWS), and the Bureau of Land Management (BLM). The primary goal of the NRDA drill was to determine how best to implement Chevron's Ephemeral Data Collection Guide in the event of an actual spill in Humboldt Bay. The drill met stated goals and objectives, and resulted in a revised "Eureka Terminal Ephemeral and Baseline Data Collection Guide."

##### *Chevron Eureka Terminal Ephemeral and Baseline Data Collection Guide*

The guide expedites and details procedures for collecting ephemeral source oil, surface water, sediment and tissue samples in the event of a petroleum spill into Humboldt Bay from the Chevron



Eureka Terminal, or potentially from another source or spill event. The document describes spill notification procedures, sampling locations, sample media, sampling procedures and chemical analysis objectives in the event of an oil spill related to operations at the Eureka Terminal facility. The plan also details procedures for collecting and analyzing petroleum hydrocarbon concentrations in surface water, sediment and tissues with the goal of understanding baseline or ambient conditions present because of anthropogenic or natural releases of petroleum hydrocarbons into Humboldt Bay that are not associated with spills. The guide represents a successful collaboration between industry and government to prepare for and improve natural resource damage assessment activities during oil spills.

#### ***Dubai Star Spill, San Francisco Bay***

Settlement negotiations with the responsible party continue. Updates and documents related to the NRDA effort can be found on DFG-OSPR's website at: <http://www.dfg.ca.gov/ospr/NRDA/Dubai-Star.aspx>.

#### ***Luckenbach Oil Spill, Northern California***

The Luckenbach Trustee Council oversees the \$22 million received from the National Pollution Fund Center to restore conditions for seabirds injured by the leaking SS *Jacob Luckenbach*, which sunk in the Gulf of the Farallones in 1953. To date, 13 of the 14 projects are underway and over \$6.2 million has been expended. Many project highlights and other documents related to the restoration projects can be found on DFG-OSPR's website at: <http://www.dfg.ca.gov/ospr/Science/Luckenbach.aspx>

NRDA also revised and restructured its website to facilitate quick access to new case updates, provide background information about the NRDA process and program, highlight DFG-OSPR's Small Spill Restoration Projects, and to give DFG points of contact for all active NRDA cases. Please see: <http://www.dfg.ca.gov/ospr/NRDA/>.

#### **PROGRAM INFORMATION**

For more information about OSPR's activities, please visit: [www.dfg.ca.gov/ospr/](http://www.dfg.ca.gov/ospr/)

- NRDA Spill updates:  
<http://www.dfg.ca.gov/ospr/NRDA/>
- Spill response website:  
<http://calspillwatch.dfg.ca.gov>
- Twitter:  
[http://twitter.com/#!/dfg\\_ospr](http://twitter.com/#!/dfg_ospr)
- Facebook:  
<http://www.facebook.com/#!/CalSpillWatch>





## 2011-2012 IN REVIEW:

### TASK FORCE MEMBER AGENCY ACTIVITIES AND ACCOMPLISHMENTS



HAZARD EVALUATION & EMERGENCY RESPONSE OFFICE OF THE ENVIRONMENTAL  
HEALTH ADMINISTRATION IN THE HAWAII DEPARTMENT OF HEALTH (HEER)

#### PROGRAM MISSION

The Hazardous Evaluation and Emergency Response (HEER) Office serves the people of the State of Hawaii by addressing all aspects of releases of hazardous substances, including oil, into the environment. Our work includes preventing, planning for and responding to hazardous substance releases or risks of releases. The HEER Office accomplishes this mission by addressing contaminated sites with the highest risk to human health and the environment first, preventing contamination rather than cleaning up after the fact, and basing decisions on sound scientific principles and common sense.

The office is comprised of three operating sections, each addressing an important aspect of its mission. The implementing sections are organized as follows: 1) Emergency Preparedness and Response; 2) Site Discovery, Assessment and Remediation; and 3) Hazard Evaluation.

The HEER Office Emergency Preparedness and Response Section (EP&R) - along with three State On-Scene Coordinators (SOSCs) - are responsible for planning, preparing for, and responding to releases of a hazardous substance and/or oil that may cause immediate and substantial threat to human health or the environment. The SOSCs have been trained to

enter hazardous atmospheres in self-contained breathing apparatus (SCBA) and various types of personal protective equipment. As back-up personnel to first responder County HAZMAT teams, SOSCs are on 24-hour call.

#### SIGNIFICANT EVENT SUMMARIES

During FY 2011, the HEER Office received 234 notifications directly concerned with the release of hazardous chemicals or oil spills. Of the 234 notifications reported, 201 were oil related and required a site response by a State On-Scene Coordinator (SOSC) and/or a major off-scene coordination and response effort. Notable among the spill responses during FY 2011-2012 were the following:

##### *Grounded Sailboat at Ala Wai Harbor*

On January 25, 2012 a 35-foot sail vessel leaving Ala Wai Yacht Harbor, Honolulu lost power from a 15 HP outboard engine, ending up on the rocks at Magic Island. The small HP engine was unable to counter the current and sea conditions. There was no oil sheen created. The operator was safely removed and the vessel cut into pieces and disposed of.

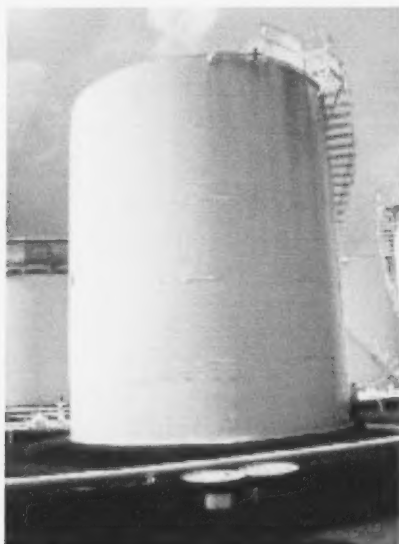






### ***Aloha Petroleum Aboveground Storage Tank Release***

On November 1, 2011, the Hilo Aloha Petroleum bulk plant had a release of 14,000 gallons of diesel fuel from one of their aboveground storage tanks during a transfer from a fuel barge in Hilo harbor. The total release stayed within the containment area of the tank farm, however the area was unlined and the soil was porous. Only 90 gallons has been recovered. The facility held a SPCC plan from EPA; we are working with EPA to look at other tank farms covered under SPCC rules.



*Aloha Terminal E Hilo; closeup of surface vacuum recovery*

### ***OIL SPILL PREPAREDNESS***

Unified Command - U.S. Coast Guard, State of Hawaii and Clean Islands Council - visited each of the Hawaii counties and met with local officials to explain the "Planning for Oil Spills" that exists and request their input and concerns. Our presentation covered the Hawaii Area Plan, available oil spill response equipment, dispersant operations, volunteer planning, wildlife care and other response issues.

### ***LEGISLATION***

There are several bills being considered this legislative session that deal with Environmental Response. One bill would provide a means for agencies to adopt emergency rules related to imminent peril to natural resources or the health of the environment; this would allow departments to respond rapidly to environmental threats. Another bill would create a wildlife recovery and rehabilitation special fund; it proposes that a portion of the petroleum barrel tax be deposited into the wildlife special fund. These funds would be used to support the operations of a facility for native wildlife in the State.

### ***PROGRAM INFORMATION***

Additional information about the environmental program and available documents can be obtained at: <http://hawaii.gov/health/environmental/hazard/index.html>.



2011-2012 IN REVIEW:

## TASK FORCE MEMBER AGENCY ACTIVITIES AND ACCOMPLISHMENTS



EMERGENCY RESPONSE PROGRAM,  
OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

### PROGRAM MISSION

The Emergency Response Program at the Oregon Department of Environmental Quality (ODEQ) supports the agency's strategic direction to protect human health and the environment from toxics by preventing, preparing for and minimizing the danger posed by catastrophic and other significant releases of dangerous chemicals.

ODEQ staff at the agency's headquarters in Portland carries out oil spill planning and preparedness responsibilities, augmented by response personnel in ODEQ's three regional offices. This program is responsible for facility and vessel oil spill contingency and prevention plan review, drills and exercises, geographic response planning and general coordination of emergency response planning activities. ODEQ provides leadership to the Northwest Area Committee and the U.S. Environmental Protection Agency's Region 10 Response Team and related emergency response committees, work groups and task forces.

ODEQ response personnel and state on-scene coordinators in Portland, Bend and Eugene carry out response activities. Staff from several other ODEQ programs enhance this work, providing after-hours coordination and filling various incident command positions as needed.

The Oregon Oil Spill Prevention Act, passed by the Oregon Legislature in 1991, directs ODEQ to develop rules to provide for the prevention, preparedness and response to oil spills from large facilities, vessels and petroleum transportation industries.

After the rules were developed and approved by the Oregon Environmental Quality Commission, ODEQ received its first facility and vessel plans for review in July 1993. The agency developed geographic response plans and the statewide Oil and Hazardous Materials Emergency Response Plan at this time. Also, ODEQ conducted several studies, including the "West Coast Oil Transfer Locations," to identify high-risk operations and areas vulnerable to oil

spills. ODEQ worked with the marine transportation and petroleum-handling industries to develop a coordinated approach to oil spill prevention, preparedness and response. Eventually the geographic response plans and the Oil and Hazardous Materials Emergency Response Plan were incorporated into the Northwest Area Contingency Plan.

### SPILL STATISTICS

ODEQ received 2,482 notifications from the Oregon Emergency Response System in 2011. Further investigation of these notifications resulted in 573 active spill projects. Of these incidents, 220 involved spilled petroleum products, about the same as the previous year. Petroleum spills included 46 releases to freshwater and six to marine waters.

In 2011, 118 petroleum spills of more than 42 gallons occurred – up from 84 in 2010. Sources for these spills included 72 from commercial trucks (46 in 2010) and five from trains. Further analysis shows there were 20 spills of petroleum over 200 gallons and only four spills larger than 1,000 gallons.

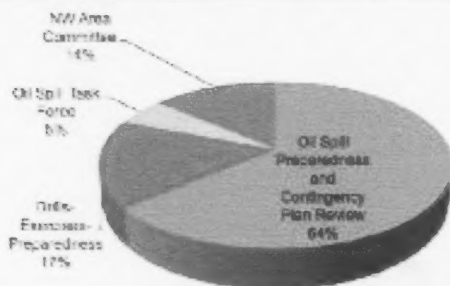
### PREPAREDNESS

ODEQ is responsible for preparedness activities as listed in Oregon Revised Statutes 468B.300 through 468B.500. These regulations require ensuring that all regulated vessels and facilities have prepared oil spill contingency plans and that those plans meet specific requirements to protect Oregon's navigable waterways. These regulations also require verification that all equipment listed in oil spill contingency plans is available and adequately maintained, that personnel listed in the plans are trained and that drills and exercises are conducted.

- Contingency Plan Review and plan holder coordination;
- Drills and exercises
- Geographic Response Plan development; and
- Northwest Area Committee (NWAC) participation.



### PROGRAM ACTIVITIES



#### Plan Review

In 2011 ODEQ approved plans covering six facilities (ConocoPhillips, KinderMorgan Linnton and Willbridge terminals, KinderMorgan Eugene and Portland Airport Pipelines and NuStar Eastern Oregon Pipeline).

#### Drills and Exercises

DEQ also participated extensively in several exercises during the past year since this is an important part of its objective to work with industry and agency counterparts to train and prepare for spills.

Worst-case discharge exercises for 2011 included:

- Chevron Pipeline Company (Eastern Oregon)
- Paramount Petroleum (Portland)
- SeaRiver Maritime

Tabletop exercises included:

- Chevron Willbridge Terminal (Portland)
- ConocoPhillips Terminal (Portland)
- Harley Marine Services
- KinderMorgan Eugene Pipeline
- NuStar Eastern Oregon Pipeline
- Pacific Terminal Services (Portland)
- Tidewater Umatilla Terminal

Government-initiated unannounced exercises included:

- ASIG-Portland Airport Terminal
- Chevron Willbridge Terminal (Portland)
- KinderMorgan Linnton Terminal
- KinderMorgan Willbridge Terminal (Portland)
- McCall Oil Company (Portland)

#### Regional Response Team and Northwest Area Committee

New for the Northwest Area Committee this year was an approach where members and stakeholders identified their top priorities for improving the Northwest Area Contingency Plan. Several task forces were created to update nine areas of the plan; the task forces will work through the year to improve content in their assigned areas. The new content will be included in the next area plan update early in 2013. The task forces will be disbanded upon completion of the assignments. The task force areas are:

- Cultural and Historic Preservation
- Derelict Vessels
- Dispersants and In Situ Burn
- General Community Outreach and Liaison
- Geographic Response Plan/Advanced Recovery
- Places of Refuge
- Shoreline Cleanup and Assessment Techniques
- Wildlife Plan Update

Below is an example of how the Places of Refuge Task Force incorporates geographical information into its product.



#### RESPONSE

ODEQ responded to more than 47 Level 3 (most severe) incidents during the past year, up from 30 the previous year. The two incidents highlighted here include a tank truck release and flooding due to a winter storm.

In November 2011 a tank truck carrying used oil wrecked on State Highway 22 near Big Cliff Dam on the Santiam River. Due to the complex geology at the site, oil migrated through the subsurface and



## 2011-2012 IN REVIEW:

### TASK FORCE MEMBER AGENCY ACTIVITIES AND ACCOMPLISHMENTS

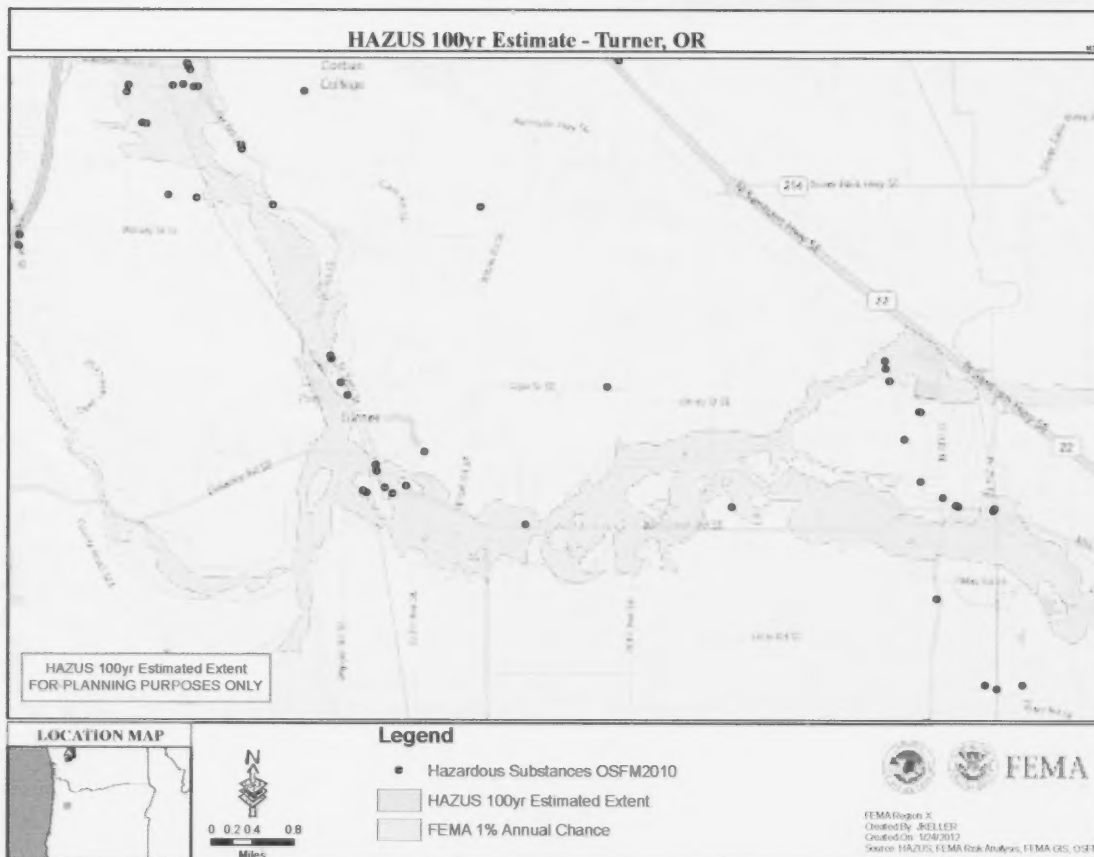
threatened to contaminate the river. Emergency responders identified an area down gradient from the spill site where water contaminated by the oil could be intercepted and an onsite wastewater treatment system was established. During the severe winter storm and flooding event, both the



Highway 22 spill.



Highway 22 spill.







wastewater treatment plant and storage tanks were overloaded and additional tank trucks were used to transport contaminated water to an off-site treatment plant. This project will be transferred to ODEQ's cleanup program for long-term monitoring.

A severe winter storm in January 2012 started with snow and ice in the Willamette Valley and transitioned into rain on top of snow to create flooding in much of western Oregon, where nine counties and the State declared emergencies. DEQ's roles included debris management and response as well as recovery of oil and hazardous materials. DEQ also distributed information through a public information effort that advised citizens to secure their hazardous materials before the floods hit their areas and how to manage storm related debris. DEQ worked with FEMA and an example of one of the maps jointly developed is displayed below; the map shows the flooding in the Turner, Oregon area and known hazardous material storage sites are layered onto the map.

#### *Abandoned and Derelict Vessels in Oregon*

In January 2011 the former WWII liberty ship Davy Crockett was the subject of an illegal ship scrapping operation near Camas, Wash. The vessel split in half and began leaking an unknown amount of oil into the Columbia River. The U.S. Coast Guard (USCG), the Washington Department of Ecology and Oregon DEQ responded in what turned into a \$22 million cleanup. Due to these efforts, members of the Northwest Area Committee formed the Derelict Vessel Task Force on May 2, 2011 to address the problem of derelict vessels, which create a public safety and environmental threat to Oregon and Washington. In addition to the agencies that responded to the Davy Crockett incident, other agencies from the federal government and the states joined the task force. Oregon agencies that joined the task force include the State Marine Board, the Oregon Department of Fish and Wildlife and the Department of State Lands.

**Mission Statement of the Derelict Vessel Task Force:** The mission of this task force is to recommend policy, share information and foster collaborative and shared efforts by task force

members to identify and mitigate the harmful effects of derelict vessels, barges and houseboats along the middle and lower Columbia River and the Willamette River.

**Progress in 2011:** The Derelict Vessel Task Force successfully conducted several patrols of the Columbia and Willamette rivers and has begun an outreach program to enlist the eyes and ears of those who are on the water the most: local law enforcement, pilots and tug operators. In addition, the USCG is now conducting regular patrols to monitor derelict vessels for changes in stability and pollution threats.

Task Force members have benefitted from learning each other's roles and responsibilities and from opening lines of communications between key decision makers within each agency. This has dramatically improved response times and led to targeted, multi-agency inspections of derelict vessels, sometimes within hours of receiving a report of a new vessel. A database has been compiled of all known or suspected derelict vessels, increasing information sharing and helping to eliminate redundant patrols of vessels. Oregon is also producing an independent report focusing on derelict vessel issues related to the Oregon side of the Columbia River, as well as Coos Bay, Reedsport and Newport.

**Looking Ahead:** The Derelict Vessel Task Force has identified several key gaps in legislation. A matrix identifying where limits in statute authority hamper ODEQ's ability to respond is now available, and a task force subgroup is working toward solutions to the complex array of derelict vessel-related problems. This subgroup is reaching out to elected officials to help determine where changes to existing laws could result in a more productive response. In 2012 the task force continues to conduct patrols and reach out to river stakeholders to identify new vessels or vessels that have a changing status.

#### *OREGON EMERGENCY RESPONSE WEBSITE*

For more information on the emergency response programs at DEQ, please go to: <http://www.deq.state.or.us/lq/cu/emergency/index.htm>





2011-2012 IN REVIEW:

## TASK FORCE MEMBER AGENCY ACTIVITIES AND ACCOMPLISHMENTS

# Washington

THE SPILL PREVENTION, PREPAREDNESS AND RESPONSE PROGRAM  
OF THE WASHINGTON DEPARTMENT OF ECOLOGY

### PROGRAM OVERVIEW

The mission of the Department of Ecology's Spill Prevention, Preparedness and Response Program is to protect Washington's environment and economy, as well as public health and safety, through a comprehensive spill prevention, preparedness, and response program. The Program focuses on the prevention of oil spills to Washington waters and land. We also plan for and conduct an effective response to oil and hazardous substance spills whenever they occur. The Program carries out a broad scope of activities, including:

- Oil spill prevention actions including vessel and facility inspections, as well as overseeing state oil transfer pre-booming requirements;
- Oil spill contingency plan review and approval, oil spill contingency plan drills, participation in the Northwest Area Committee and development of geographic response plans;
- Acting as the state's lead organization for environmental emergency response. This work focuses on providing a rapid, aggressive and well coordinated response 24/7 to oil and hazardous materials spills statewide from our four regional and two smaller field offices;
- Leading the state oil spill Natural Resource Damage Assessment and Restoration (NRDAR) efforts; and
- Working with the Washington Department of Fish and Wildlife in planning for and managing oiled wildlife care.

### Change as a Constant

Environmental, technological and societal change appears to be accelerating around the globe and in Washington State. Our Spill Prevention, Preparedness and Response Program prides itself in being collaborative, action oriented and adaptable. Dale Jensen, Ecology's Spill Program Manager and Task Force member, believes that *"in this era of dynamic change, our program will continue to place a high value on listening to its stakeholders, paying close attention to lessons learned from spills. We will use this knowledge to ensure our program has a culture*

*that values good communication, adaptive management, spill prevention and rapid response to environmental threats."*

### STRATEGIC PLANNING

Washington has one of the most comprehensive maritime safety nets in the nation. Our system was established in response to the specific risks related to long transit distances from the Pacific Ocean to our major Puget Sound and Columbia River ports. Deep draft ships and oil barges face many risks or hazards in our waterways due to high vessel traffic volumes, stormy, unpredictable weather, fog and fast currents, and rocky islands and headlands.

Our maritime safety net is essential for protecting our state's role in oil shipping and refining as well as Pacific Rim trade. The potential exists for a major transboundary oil spill that could affect our shared waters with British Columbia and Oregon. As a result, we must continually adapt our oil spill prevention, preparedness and response activities. We do this by addressing:

- Lessons learned from the 2010 Gulf of Mexico oil spill;
- Economic impacts on the competitiveness of Washington's ports;
- Dramatic increases in Alberta crude oil exports through our waters from Canada;
- Our community's crucial investments in restoring and protecting Puget Sound;
- Regional implications of the 2010 Coast Guard Authorization Act; and
- Increased value of our natural resources.

### RULEMAKING

#### Oil Spill Contingency Plan Rule Update

In 2011 Ecology was directed to conduct rulemaking to implement House Bill 1186, which addresses oil spill response planning standards. Under the law, oil companies that operate on or near the waters of Puget Sound, the outer coast and the Columbia River



will need to invest in response equipment and personnel to provide continuous on-water oil cleanup activities – even at night and during fog and rain.

Under the law, Ecology must adopt rules by December 31, 2012 that:

- Update state oil spill preparedness planning standards to incorporate best achievable protection and best available technology;
- Improve the state's current vessels of opportunity system;
- Establish a volunteer coordination system;
- Require joint large-scale equipment deployment drills from tank vessels;
- Improve the state-required notification process to include potential spill threats as well as actual spills;
- Change contingency plan requirements for nonprofit "umbrella" organizations;
- Update definitions;
- Make other changes related to oil spill contingency plans and Ecology's contingency plan review and approval process;
- Update the monetary amount of compensation that can be calculated for spills of 1,000 gallons or more; and
- Notification of the vessel emergencies to the State.

In January of 2012, Ecology convened a Rule Advisory Committee consisting of representatives from industry, the business sector, environmental interests, local and tribal governments for the purpose of consultation on the update to the Contingency Plan rule. Over the next five months the Rule Advisory Committee will be engaged in ongoing discussion about the major issues that need to be addressed during this rulemaking. Formal rulemaking will start in June 2012 and rules will be adopted in December of 2012.

#### ***Natural Resources Damages Assessment Rule Update***

House Bill 1186 also required changes to the existing rule for natural resources damages assessments for spills to state waters. The rule will be updated to:

- Change the monetary amount of compensation that can be calculated for spills of 1,000 gallons or greater in volume from the current range of \$1

to \$100 to a new range of \$3 to \$300 per gallon spilled;

- Define persistent oil, non persistent oil, primary recovery liquids, secondary recovery liquids, and persistent oil recovery liquids; and
- Codify the method to provide credit back to a spiller for their early on-water recovery actions by moving previous NRDA committee guidance into rule.

#### ***SPILL PREVENTION***

##### ***Ecology addresses changing spill risks***

While Washington has one of the nation's most robust maritime safety webs, we must verify that the system can address increasing demands stemming from projected growth in maritime commerce. There are at least two major industry projects that would greatly expand vessel and cargo traffic along the 125-mile international maritime border between Washington and British Columbia:

1. A proposal by SSA Marine to expand the Gateway Pacific terminal and facility located between the BP and ConocoPhillips refineries at Cherry Point-Ferndale. The development is projected to increase regional vessel arrivals by nearly 500 annually. The proposed terminal is being designed to accommodate multiple vessels in excess of 200,000 dead weight tons (DWT) in size. The Gateway Pacific project cannot proceed until a vessel traffic safety risk assessment is done and reviewed by Ecology.
2. In Canada, Kinder-Morgan proposes to more than double their crude oil production and exports by expanding their marine terminal in Vancouver, British Columbia. Crude oil tanker traffic into Vancouver has already increased 200 percent during the past five years. Kinder-Morgan anticipates producing and marketing Alberta tar sands crude oil, including a projected 300 percent increase in tanker transits by 2016. This increased tanker traffic will pass along the pristine San Juan Islands archipelago.

##### ***Improve marine safety by emphasizing a risk-based approach***

Our goal is to partner with the Coast Guard in order to combine our limited resources and conduct timely, cost-effective risk assessments and recommendations to help prevent spills and maritime



## 2011-2012 IN REVIEW:

### TASK FORCE MEMBER AGENCY ACTIVITIES AND ACCOMPLISHMENTS

casualties. There are a number of maritime safety provisions in the Coast Guard Authorization Act of 2010 that address economic viability and environmental protection in our state waters, including:

- Requirements to identify, assesses and recommend mitigation strategies to reduce human error-caused oil spills and near-miss incidents;
- Expansion of the higher volume port area for Puget Sound to enhance spill response capabilities for the Washington coastline; and
- Strong encouragement for the Coast Guard to work with the U.S. State Department, Washington State, and affected tribal governments to negotiate with our Canadian counterparts to update the marine safety and response standards comparability analysis.

## SPILL PREPAREDNESS

### *Volunteer Management*

House Bill 1186 directs Ecology to establish a volunteer coordination system as a part of the state's overall oil spill response strategy. In December of 2011, Ecology began meeting with local emergency managers to discuss options regarding the process for handling oil spill volunteers in relationship to the state and local government roles, mechanisms for retaining volunteer information, processing volunteers (pre-trained and convergent), training, and liability for volunteers. These discussions will inform the state as we develop a volunteer management plan to be included in the Northwest Area Contingency Plan. In addition to a plan, Ecology is pursuing investment in a web base system to manage volunteer information, communication and outreach to volunteers.

### *Managing the drill program through budget shortfall*

In 2009, due to a \$2 million budget shortfall, the Spills Program had to cut eight positions. Our preparedness section was particularly hit hard. As a result, our focus on drills changed to allow industry tabletop drills to be self-certified rather than evaluated by Ecology. The number of our unannounced drills was dramatically reduced as well. Instead, our primary focus turned to larger equipment deployment drills. These drills have been

expanded in scope and scale. Some larger drills simultaneously test protection strategies and on-water recovery systems in all of the various operating environments experienced in Washington. This refocus allowed us to maximize our equipment verification, inspection and testing program. By 2010, Ecology started strengthening our internal tools and knowledge and we intend to start fully participating in the planning, execution and evaluation of tabletop drills by 2012.

### *National Preparedness for Response Exercise Program (NPREP)*

In June of 2011, Ecology and the US Coast Guard co-hosted the NPREP exercise in the Oak Harbor, Washington. In order to aggressively test the Northwest Area Contingency Plan, area responders and response partners, the exercise was based on an "orphan" spill scenario where there is no responsible party (RP). This scenario required agency responders and agency partners to test their ability to stand up and field an aggressive response together, without infrastructure and support from an industry RP. The scenario was also designed to impact Canadian waters, allowing the additional component of engaging and activating Canadian Coast Guard and other response agencies. This component tested the CANUSPAC Geographical Annex to the Joint Marine Contingency Plan between Canada and the U.S. Forty-four Ecology staff and others from federal, local, and Canadian personnel participated in the two day exercise. The exercise objectives tested a number of aspects of an orphan spill including:

- Effective communication to media, local and governmental outreach and education through liaison;
- Oiled wildlife volunteer activation;
- Unified Command decisions process on use of dispersants and in-situ burning;
- Contractor resources and contracting logistics; and
- Cross boundary response issues with Canada including responder immunity issues and equipment movement over borders.



## SPILL RESPONSE

### **BNSF Train Derailment in Tacoma**

At approximately 8:00 p.m. on February 26, 2011, a northbound 103-car freight train derailed and side-swiped a south-bound train impacting a total of 14 rail cars including four tank cars fully-loaded with sodium hydroxide. Three of the tank cars ended up on the shore of Puget Sound and the fourth tank car was on the bank under two damaged box cars. West Pierce County Fire and Rescue, the Pierce County Hazardous Incident Team and an Anderson Island fire boat quickly responded to the wreck. A King County Sheriff's Department helicopter with infrared capabilities was also brought in to assist with



*BNSF Train derailment in Tacoma, WA on February 26, 2011.*

assessment of the incident. BNSF and their environmental contractor also responded quickly to the scene. Only one of the tank cars, each containing 15,000 gallons of chemical, was leaking; an estimated 50 gallons of sodium hydroxide leaked to the beach before a response crew could plug and secure the leaking tank car. The damaged boxcars were either empty or contained non-hazardous materials.

A Unified Command comprised of the U. S. Coast Guard, the Department of Ecology and BNSF managed the response to the derailment and removal of the tank cars from the shore. One main-line track was cleared by 1:00 p.m. on Sunday afternoon and the second track was cleared by 11:00 p.m. The tank car on the bank was moved to the upland side of the tracks where the sodium

hydroxide was pumped off. The three tank cars on the beach were pumped off on Tuesday, March 1. During the recovery 100 gallons of sodium hydroxide spilled to the access road adjacent to the rail tracks. Cleanup of the impacted beach area involved removing standing liquid and neutralizing the remaining chemical in the sand. The upland spill area was cleaned up by vacuum truck and soil excavation. Samples were collected to ensure that cleanup of both sites is complete. The tank cars were fully cleaned at the accident site before being cut-up and hauled off as scrap metal. Ecology fined BNSF Railway \$3,000 for spilling 150 gallons of liquid sodium hydroxide. Beaches are state waters under Washington law.

### **MV Edfu**

On Tuesday, March 10, 2011 Ecology and the USCG responded to a 728-foot bulk carrier that lost propulsion in the Pacific Ocean about nine miles west of Cape Disappointment near the mouth of the Columbia River. There was no cargo on board, but the vessel was carrying fuel oil. The USCG swiftly issued a comprehensive Captain of the Port order requiring two tugs of adequate size and horsepower to tend the vessel while anchored off the Oregon coast undergoing repairs. The ocean-going tugs *Natoma* and *Pacific Explorer* were deployed to the scene to assist the vessel. After two days, the *M/V Edfu* crossed the Columbia River bar under its own power. The final U.S. destination for the vessel was Kalama, Washington. Ecology boarded the vessel and worked closely with the U.S. Coast Guard to determine why the *M/V Edfu* lost power and propulsion.



*Bulk carrier MV Edfu propulsion lost near the mouth of the Columbia River on March 10, 2011*





## 2011-2012 IN REVIEW:

### TASK FORCE MEMBER AGENCY ACTIVITIES AND ACCOMPLISHMENTS

#### ***Barge Grounding St. Elias***

Coast Guard Sector Puget Sound received a report at approximately 5:45 a.m. on Monday, October 10, 2011 that a barge had run aground on Belle Rock near Anacortes. The 322-foot barge *St. Elias* was being towed south through Rosario Strait by the 101-foot tug *Henry Brusco*. *St. Elias*' cargo included approximately 100 containers, some with explosive ordinance and several vehicles. An HH-65 helicopter crew from Coast Guard Air Station Port Angeles conducted an over flight and reported no pollution. U.S. Navy Explosive Ordnance Disposal (EOD) Team members and a U.S. Coast Guard inspector boarded the barge to conduct a safety assessment. The explosives were secured and - as a precaution - a 2,000-yard safety zone was established and mariners transiting Rosario Strait near Belle Rock were urged to use caution. Containment boom was deployed around the barge as an additional precaution. The following day the barge was refloated, inspected and towed to Indian Island. The hull of the 322-foot, dry-cargo barge was inspected by divers contracted from Global Diving & Salvage, who located a 10-foot by 10-foot hole in the forward starboard hold. The breach had a minor effect on stability of the vessel and draft readings indicated an insignificant change to the barge's trim. The cargo remained stable throughout the incident. Ecology confirmed that a fuel tank on the barge's deck had been emptied and contained only residual fuel.

#### ***PROGRAM INFORMATION***

For more information on the Washington Department of Ecology, please visit: [www.ecy.wa.gov](http://www.ecy.wa.gov).

Ecology's Spill Prevention, Preparedness and Response Program website is: <http://www.ecy.wa.gov/programs/spills/spills.html>



*Diesel Spill from Pettit Tank Truck*



[www.oilspilltaskforce.org](http://www.oilspilltaskforce.org)